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# **Evaluation of Access and Quality of Health Care Under the TRICARE Program (FY 2000 Report to Congress)**

Peter H. Stoloff • Michele Almendarez

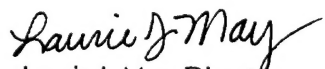
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## Foreword

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The *FY 2000 Evaluation of the TRICARE Program* was performed jointly by the CNA Corporation and the Institute for Defense Analyses (IDA) for the Office of the Assistant Secretary of Defense (Health Affairs). The objectives of the evaluation were to assess (1) the effectiveness of the TRICARE program in improving beneficiaries' access to health care, (2) the impact of TRICARE on the quality of health care received by Military Health System (MHS) beneficiaries, and (3) the effect of TRICARE on health care costs to both the government and MHS beneficiaries.

This document represents the Center for Naval Analyses' contribution to the Evaluation of the TRICARE Program, FY 2000 Report to Congress.<sup>1</sup> The full report also includes IDA's evaluation of the costs to the government and beneficiaries. The TRICARE evaluation project is an ongoing effort that provides an annual report to the Congress as the program matures.

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<sup>1</sup> Stoloff, Peter H. (CNA); Lurie, Philip M. (IDA); Goldberg, Lawrence (IDA); Almendarez, Michele (CNA). *Evaluation of the TRICARE Program: FY 2000 Report to Congress*, 1 Nov 2000.



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## EXECUTIVE SUMMARY

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The 104th Congress, through enactment of the National Defense Authorization Act for fiscal year (FY) 1996, Section 717, directed the Secretary of Defense to arrange for an ongoing, independent evaluation of the TRICARE program. The legislation requires that the evaluation assess the effectiveness of the TRICARE program in meeting the following objectives:

- improve the access to and quality of health care received by eligible beneficiaries,
- keep both government and beneficiary costs at levels the same as or lower than before TRICARE was implemented, and
- identify noncatchment areas in which the health maintenance organization (HMO) option of the program (i.e., TRICARE Prime) is available or proposed to become available.

Because the FY 1998 Report to Congress and others have already extensively addressed the issue of extending the Prime option to noncatchment areas, there are no plans to reevaluate it this year.

This year's evaluation covers eight Health Service Regions operating under TRICARE during FY 1998. Only regions with at least one full year under TRICARE by the end of FY 1998 were included in the evaluation. The regions that satisfy this criterion are Regions 3 (Southeast), 4 (Gulf South), 6 (Southwest), 7/8 (Central), 9 (Southern California), 10 (Golden Gate), 11 (Northwest), and 12 (Hawaii). Regions 1 (Northeast), 2 (Mid-Atlantic), and 5 (Heartland) will be covered in next year's evaluation.

Region 11 is being evaluated for the third time; Regions 3, 4, 6, and 9-12 for the second time; and Region 7/8 for the first time. The general evaluation approach is to compare actual access, quality, and costs under TRICARE in FY 1998 with estimates of what those attributes would have been had TRICARE not been implemented. The latter estimates are derived by adjusting observed measures of access, quality, and costs under the traditional military health care benefit in FY 1994 (the last complete fiscal year before TRICARE was implemented) for changes known to have occurred between then and FY 1998. Such changes include but are not limited to inflation, Base Realignment and Closure, force size reductions, and the beneficiary demographic mix (for example, there was a higher concentration of retirees in the FY 1998 population than in the FY 1994 population).

Ideally, it would be desirable to have a control group from which to isolate the effects of TRICARE from extraneous influences on access, quality, and costs. A control group would consist of beneficiaries with characteristics similar to those using TRICARE, but using the traditional military health care benefit instead. Additionally, the health care environment under which they were receiving care would have to be similar in all respects to the current environment, with the exception of TRICARE. For example, they would have to receive care from military hospitals with similar capacities and mix of services as those operating in the evaluation regions before the implementation of

TRICARE. The civilian health care alternatives would have to be similar as well, including the level of private insurance coverage and provider density.

After considering the criteria for forming a control group, the study team determined that no satisfactory control group could be constructed. The natural tendency might be to compare the TRICARE regions with those not yet under TRICARE, but the regions are too dissimilar in more respects than TRICARE. A comparison of trends in the TRICARE regions with trends in the non-TRICARE regions would not likely yield a pure TRICARE effect because it would be confounded with other extraneous influences difficult to control for. The study team therefore concluded that it was best to compare the same regions pre- and post-TRICARE and to adjust the pre-TRICARE results for known changes over time to determine how access, quality, and costs would have progressed in the absence of TRICARE. However, because some changes, such as improvements in medical technology and business practices, cannot easily be measured, it is not possible to completely isolate the effect of TRICARE from changes that might have occurred anyway. When considering the results to follow, the reader should bear in mind that the changes displayed should be interpreted as occurring *under* TRICARE, but not necessarily *because* of TRICARE. Also, because the effects of TRICARE vary by region, the results of this evaluation cannot necessarily be extrapolated to the regions not yet evaluated (Regions 1, 2, and 5).

## **Access to Care**

The evaluation of changes in access and quality of care used data from the 1994, 1996, 1997, and 1998 Health Care Surveys of DoD Beneficiaries. These surveys sampled representative cross sections of all beneficiaries in each respective year. To isolate the effects of the TRICARE program, it was necessary to control for beneficiary population changes that could affect access, such as health status and various demographic characteristics. These effects were controlled using statistical regression analysis.

In the regions studied, access to health care generally improved under TRICARE. Table ES-1 summarizes the changes in access between 1994 and 1998 for all DoD beneficiaries in the regions studied. Enrollees in TRICARE Prime (the HMO option) tended to be satisfied with their level of access. Those enrolled with a military Primary Care Manager<sup>1</sup> (PCM) tended to report greater levels of satisfaction with access than those enrolled with a civilian PCM. Three kinds of access measures were used to reach these conclusions: realized access, availability, and the process of obtaining care.

TRICARE has emphasized well-care and preventive medicine. Table ES-1 shows a general increase in the receipt of preventive care from 1994 to 1998 for the beneficiary population as a whole. Gynecological procedures, including Pap tests, are an exception to this trend.

There has also been a perception of increased availability of care. A greater proportion of the population reported that they were able to get care when they felt they needed it.

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<sup>1</sup> Throughout this report, the term "military PCM" refers to a provider at a military facility, regardless of whether the provider is in the uniformed services or a civilian. Similarly, the term "civilian PCM" refers to a provider at a network facility.

**Table ES-1. Summary of Changes in Access  
(All Evaluated Regions and Sources of Care Combined)**

Measure	Before TRICARE (FY 1994)	After TRICARE (FY 1998)
<u>Realized Access</u>		
Use of preventive care		
BP check	0.81	0.91*
Dental care past year	0.60	0.68*
Flu shot past year	0.46	0.54*
Mammogram past year (50+)	0.68	0.71*
PAP test past year	0.69	0.66*
Prostate check past year (age 40+)	0.57	0.60*
Having a medical visit	0.81	0.91*
Use of the emergency room	0.42	0.29*
<u>Availability (Satisfaction with)</u>		
Access to care	0.72	0.80*
Access to hospital care	0.80	0.86*
Access to emergency care	0.79	0.82*
Access to specialists	0.65	0.76*
Access to information by phone	0.59	0.76*
Access to prescription services	0.85	0.88*
<u>Obtaining Care (Satisfaction with)</u>		
Ease of making appointment	0.67	0.88*
Wait time for an appointment	0.68	0.78*
Convenience of hours	0.81	0.87*
Convenience of treatment location	0.83	0.88*
Wait to see provider	0.65	0.74*

Note: Results exclude Regions 1, 2, and 5.

\* Indicates statistically significant change ( $p < 0.05$ ).

The greatest increases in perceived access are among those who enrolled in Prime, as shown in Table ES-2. Note, however, that the level of perceived access to care when needed, in general, is considerably higher for those receiving care outside the military system (about 92 percent satisfied, with a 2-percentage-point increase over time). Thus, while TRICARE seems to result in an impression of improved access to care, it still has room for improvement.

## Quality of Care

This evaluation considered two major aspects of quality: meeting national standards, and quality of care as perceived by DoD beneficiaries. DoD has adopted as its standard the national health-promotion and disease-prevention objectives specified by the U.S. Department of Health and Human Services in *Healthy People 2000*.<sup>2</sup> Care levels under TRICARE were compared with these national standards. As Table ES-3 shows, most of

<sup>2</sup> Department of Health and Human Services, Office of Disease Prevention and Health Promotion, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, 1991.



the goals are being met or are nearly being met under TRICARE. Shortfalls are mainly in the area of use of tobacco products.

**Table ES-2. Summary of Changes in Perceived Access to Care for Prime Enrollees  
(All Evaluated Regions Combined)**

Measure	Before TRICARE (FY 1994)	After TRICARE (FY 1998)
<u>Availability (Satisfaction with)</u>		
Access to care	0.63	0.74*
Access to hospital care	0.73	0.81*
Access to emergency care	0.72	0.74*
Access to specialists	0.50	0.66*
Access to information by phone	0.46	0.70*
Access to prescription services	0.80	0.85*
<u>Obtaining Care (Satisfaction with)</u>		
Ease of making appointment	0.53	0.71*
Wait time for an appointment	0.56	0.73*
Convenience of hours	0.72	0.81*
Convenience of treatment location	0.81	0.86*
Wait to see provider	0.53	0.68*

Note: Results include active duty personnel, retirees, and their family members, and exclude Regions 1, 2, and 5.

\* Indicates statistically significant change ( $p < 0.05$ ).

**Table ES-3. Meeting Quality of Care Goals in FY 1998  
(All Sources of Care and All Evaluated Regions Combined)**

Measure	DoD Goal	MHS Beneficiaries
<u>Met or Exceeded Goal</u>		
Mammogram past 2 years (age 50+)	0.60	0.87*
Ever had mammogram (age 40-49)	0.80	0.91*
Breast exam past year (age 40+)	0.60	0.69*
Cholesterol test past 5 years	0.75	0.81*
PAP smear past 3 years	0.85	0.89*
Ever had PAP test	0.95	0.99*
Know results of BP check	0.90	0.92*
First trimester care	0.90	0.92
Did not chew tobacco past year (all ages)	0.96	0.95
<u>Shortfalls</u>		
Did not chew tobacco past year (age 18-24)	0.96	0.86*
Did not smoke (age 18-24)	0.80	0.76*
Dental care past year	0.70	0.67*
Pregnant non-smoker	0.90	0.88*
Physical exam (AD only)	0.95	0.59*

\* Indicates statistically significant difference between goal and level of beneficiary care ( $p < 0.05$ ).

Also examined were beneficiaries' perceptions of the quality of their health care under TRICARE. As shown in Table ES-4, the general pattern of results suggests that most

beneficiaries were satisfied with the quality of their care. The changes in perceived quality between 1994 and 1998 were statistically significant and in the positive direction.

**Table ES-4. Measures of Perceived Quality of Care—All Evaluated Regions Combined  
(Proportion of Population Satisfied with Quality Attribute)**

Satisfaction Measure	FY 1994	FY 1998
Ability to diagnose	0.78	0.85
Administrative staff courtesy	0.79	0.93
Attention by provider	0.79	0.89
Explanation of medical tests	0.80	0.86
Explanation of procedures	0.81	0.87
Health care resources	0.56	0.70
Health care technical aspects	0.71	0.79
Outcome of health care	0.81	0.87
Overall quality of care	0.81	0.88
Skill of provider	0.83	0.89
Thoroughness of exam	0.79	0.87
Thoroughness of treatment	0.81	0.87
Time spent with provider	0.75	0.85

Note: All differences between 1994 and 1998 perceived satisfaction levels were statistically significant ( $p < .05$ ).

## Satisfaction with Filing Medical Claims

Fewer people have had to file claims under TRICARE (44 percent in FY 1994, and 33 percent in FY 1998). The rate of claim filing for MHS beneficiaries was higher than that observed under plans serving the general population (29 percent in FY 1998). At the same time, MHS beneficiaries tend to experience more problems per claim filed than the general population (53 versus 40 percent). Having a problem with a claim is a major cause of dissatisfaction with one's health plan. Those who experienced problems with claims processing were 25 percent more likely to rate their health plan lower than those who did not have problems with claims.

## Effects of Region Maturity

As TRICARE has matured, satisfaction with access and quality of care has increased, particularly among Prime enrollees, as shown in Table ES-5.

**Table ES-5. Percentage of Prime Enrollees Satisfied with Indicator**

Indicator	Region Maturity (Years Into TRICARE)			
	Pre-TRICARE	+1	+2	+3
Access to care when needed	59	71	73	78
Overall quality of care	68	77	80	85

Note: Prime enrollees include active duty members, retirees, and family members.

## Cost to the Government

Absent a control group, the study team constructed an FY 1994 baseline by adjusting actual FY 1994 costs for inflation, rightsizing Military Treatment Facilities (MTFs), and changing the size and composition of the beneficiary population. The FY 1994 baseline represents an estimate of what government costs would have been in FY 1998 had the traditional military health care benefit been continued. Estimated FY 1994 baseline costs were then compared with actual FY 1998 costs under TRICARE. Table ES-6 summarizes the findings with regard to government costs for the TRICARE regions covered by this evaluation.

**Table ES-6. Effect of TRICARE on Government Costs  
(Millions of FY 1998 Dollars)**

Source	FY 1994 Baseline	FY 1998 TRICARE	Difference
Direct Care	\$5,931	\$5,504	-\$427
Managed Care Support	2,132	2,213	81
Other Government Costs	579	607	28
Total Government Cost	\$8,641	\$8,323	-\$318

Note: Excludes Regions 1, 2, 5, Alaska, and overseas.

An effort was made to provide as complete an accounting of MHS costs as possible. However, it is not possible to develop a complete reconciliation between DoD information systems and the Defense Health Program (DHP), partly because DHP obligations translate into outlays over a multi-year time frame. In addition, there is no standard crosswalk between DoD information systems and any particular subset of program elements that make up the DHP. Consequently, the costs identified do not align completely with the FY 1998 DHP, which was \$15.8 billion. The total worldwide costs identified from DoD information systems were only \$14.1 billion.

Direct care costs include the cost of providing health care services at MTFs as well as administrative and overhead costs. All health care services were considered, whether or not they were affected by TRICARE (e.g., dental care costs were included). TRICARE had its biggest impact on inpatient costs, which declined by 32 percent under TRICARE. Not only did the hospitalization rate go down, but the average length of stay declined as well. On the other hand, outpatient utilization and costs increased under TRICARE. Under managed care, inpatient utilization tends to decline because Peer Review Organizations must determine that an admission is medically necessary, and outpatient utilization tends to increase because access has improved (especially for enrolled retirees). That pattern is consistent with the successful application of utilization management and corresponds with what typically occurs in commercial managed-care settings. On balance, direct care costs under TRICARE were \$427 million lower than those in the FY 1994 baseline.

Civilian-sector care under TRICARE is arranged by Managed Care Support (MCS) contractors, who supplement the care provided at MTFs. FY 1998 MCS costs under TRICARE were \$81 million higher than CHAMPUS costs in the FY 1994 baseline.

Although both inpatient and outpatient costs were lower, they were more than offset by high contractor administrative costs. Administrative costs comprised an average of 17 percent of total MCS contract value throughout the TRICARE regions.

The one health service for which utilization and costs have continued to increase under TRICARE is prescriptions. Prescription costs increased by over \$200 million throughout the TRICARE regions. These increases included prescriptions filled at MTF pharmacies in connection with MTF visits (up \$81 million), prescriptions written by civilian physicians but filled at MTF pharmacies (up \$66 million), and prescriptions filled at MCS network pharmacies (up \$52 million). In addition, the new National Mail Order Pharmacy benefit increased costs by another \$13 million. The pattern of escalating prescription costs is not unique to TRICARE, however. Prescription costs have been spiraling ever higher in the civilian sector as well.

Despite the increases in prescription costs and the administrative costs on the MCS contracts, total government costs under TRICARE were \$318 million lower than those in the FY 1994 baseline. It is too early to say, however, whether there is a trend towards reduced costs under TRICARE. The cost reduction in FY 1998 was 4.4 percent of costs that could reasonably have been affected by TRICARE (e.g., excluding dental care), whereas it was 5.5 percent in FY 1997.

Although the government realized a decrease in its costs under TRICARE, approximately half of the decrease appears to be attributable to reduced utilization of the Military Health System by nonenrolled beneficiaries. Direct-care inpatient utilization by nonenrollees declined by 26 percent, and purchased-care inpatient and outpatient utilization each declined by about 5 percent. According to the 1998 Health Care Survey of DoD Beneficiaries, 14 percent of nonenrollees added private insurance coverage because of TRICARE. Furthermore, under TRICARE there has been a decline in the incidence of purchased-care claims filing by nonenrollees with private health insurance.

## **Cost to Covered Beneficiaries**

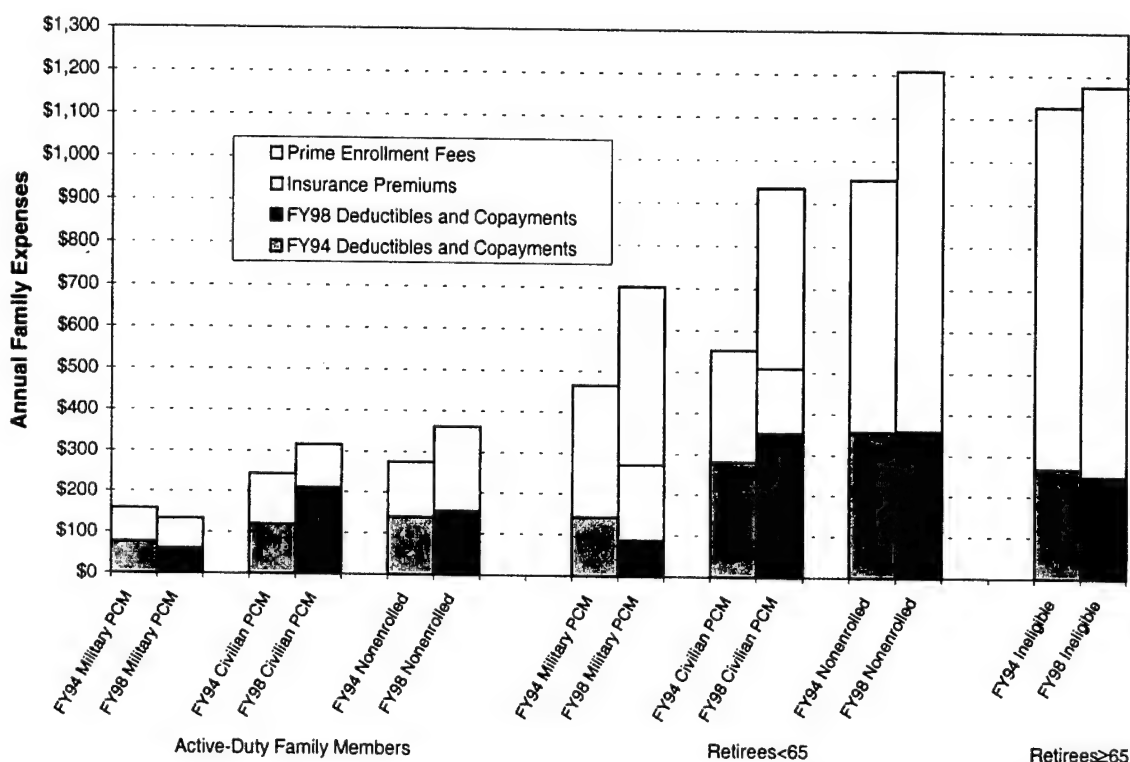
To evaluate costs to both TRICARE-eligible and Medicare-eligible beneficiaries, the beneficiary family was used as the unit of analysis. This is because insurance decisions are made on a family basis, and because deductibles are capped for families. TRICARE can affect beneficiaries' out-of-pocket costs by

- eliminating deductibles and lowering copayments for Prime enrollees,
- increasing the utilization of health care services by Prime enrollees as a result of lower per-visit costs,
- forcing nonenrollees to seek more costly care under TRICARE Standard or from the private sector by reducing space-available care at MTFs,
- inducing enrollees to drop and nonenrollees to add supplemental or other private health insurance coverage, and
- assessing an enrollment fee on retirees and their family members.

Consequently, out-of-pocket costs for TRICARE-eligibles include deductibles and copayments for purchased care, TRICARE Prime enrollment fees, and premiums for supplemental and other private health insurance. Note that non-active-duty members with

a military PCM still incur copayments under TRICARE when they are referred to the civilian network for care. For Medicare-eligibles, who are ineligible to enroll in Prime or to use purchased care, costs affected by TRICARE include Medicare deductibles and copayments and insurance expenses.

Figure ES-1 shows the effect of TRICARE on beneficiaries' out-of-pocket expenses by sponsor type and enrollment status. For active-duty families, annual expenses declined slightly for those with a military PCM and increased somewhat for those with a civilian PCM. For active-duty families with a civilian PCM, expenses increased because they used substantially more health care services. For active-duty families who did not enroll in Prime, out-of-pocket expenses increased by \$87. The increase in expenses for active-duty families was due primarily to higher insurance costs.



**Figure ES-1. Effect of TRICARE on Family Out-of-Pocket Expenses**

For retiree families enrolled with a military PCM, out-of-pocket costs increased \$236 under TRICARE. Higher enrollment fees more than offset the decline in deductibles, copayments, and insurance expenses for those families. Even without the enrollment fee, costs under TRICARE were only slightly lower for retiree families enrolled with a civilian PCM. The reason for this seemingly anomalous result is that families with a civilian PCM have much higher utilization under TRICARE, thereby increasing their expenses. With the addition of the enrollment fee, out-of-pocket costs for families with a civilian PCM increased by \$381. Out-of-pocket expenses increased by \$254 for nonenrolled retiree families because of a \$252 increase in insurance expenses.

Medicare-eligible families experienced an increase of \$55 in their out-of-pocket costs under TRICARE. The reason this group of beneficiaries was relatively unaffected (in terms of out-of-pocket costs) by TRICARE is that most of them were heavily insured even before TRICARE. Over 80 percent had some form of insurance coverage, including Medigap policies, Medicare Risk HMOs, and current or former employer-provided insurance. The Medicare-eligibles who are most likely to be affected by TRICARE are those with only basic Medicare coverage. From the 1998 Health Care Survey of DoD Beneficiaries, the latter group also has the lowest family incomes.

## **Overall Conclusion**

During FY 1998, both the access to and quality of health care for DoD beneficiaries improved under TRICARE. Government costs under TRICARE were lower than the estimated costs had the traditional health care benefit been extended through FY 1998. Beneficiary out-of-pocket costs were lower for most active-duty families, but were higher for TRICARE-eligible retiree families. Out-of-pocket costs for Medicare-eligible families were only marginally higher under TRICARE because most of these families continue to carry supplemental forms of private insurance. In addition, the availability of Medicare Risk HMOs in some regions provides a low-cost alternative to TRICARE.

# 1. INTRODUCTION

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The 104th Congress, through enactment of the National Defense Authorization Act for fiscal year (FY) 1996, Section 717, directed the Secretary of Defense to arrange for an ongoing, independent evaluation of the TRICARE program. The legislation requires that the evaluation assess the effectiveness of the TRICARE program in meeting the following objectives:

- improve the access to and quality of health care received by eligible beneficiaries,
- keep both government and beneficiary costs at levels the same as or lower than before TRICARE was implemented, and
- identify noncatchment areas in which the health maintenance organization (HMO) option of the program (i.e., TRICARE Prime) is available or proposed to become available.

Because the FY 1998 Report to Congress and others have already extensively addressed the issue of extending the Prime option to noncatchment areas,<sup>1</sup> there are no plans to reevaluate it this year.

The legislation further states that the Secretary may use a Federally Funded Research and Development Center to conduct the evaluation. The Office of the Assistant Secretary of Defense for Health Affairs [OASD(HA)] selected the CNA Corporation and the Institute for Defense Analyses (IDA) to conduct the evaluation.

This year's report extends the evaluation of the TRICARE program to eight Health Service Regions—3 (Southeast), 4 (Gulf South), 6 (Southwest), 7/8 (TRICARE Central), 9 (Southern California), 10 (Golden Gate), 11 (Northwest), and 12 (Hawaii). A common framework is developed for the analysis of access and quality of care and the analysis of utilization and cost. Access, quality, and costs under TRICARE in FY 1998 are compared with estimates of those attributes under the traditional military benefit of direct care and the Civilian Health and Medical Program of the Uniformed Services (CHAMPUS) that prevailed in FY 1994. The latter estimates are adjusted for known changes in the military beneficiary population composition and size. The FY 1994 cost estimates are also adjusted for inflation, changes in Military Treatment Facility (MTF) accounting, and Base Realignment and Closure (BRAC) and other Service "rightsizing" initiatives.

Regions 7 and 8 (consolidated into TRICARE Central) experienced their first full year under TRICARE in FY 1998 and are evaluated for the first time in this report. Region 11 is evaluated in its third full year under TRICARE whereas the other regions covered by this evaluation (other than TRICARE Central) are evaluated in their second year. The remaining regions [1 (Northeast), 2 (Mid-Atlantic), and 5 (Heartland)] will be covered in the FY 2001 report.

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<sup>1</sup> A catchment area is an approximately 40-mile-radius region around a military hospital, allowing for natural geographic boundaries and transportation accessibility. Noncatchment areas lie outside catchment area boundaries.



As with the previous evaluations, there is no control group from which direct inferences can be made on how access, quality, utilization, and cost would have progressed in the absence of TRICARE. For this evaluation, a control group would consist of regions with similar MTF services and capacities, serving similar beneficiary populations in terms of size, composition, health, and private insurance coverage. Furthermore, the control regions would have to conduct business in a manner uninfluenced by TRICARE. Because it is believed that no such control regions exist, all comparisons under TRICARE are made with the traditional approach to military health care delivery adjusted, where possible, for known changes that would likely have occurred even in the absence of TRICARE. Thus, if TRICARE is found to be effective in terms of its stated objectives, this does not mean that it is more effective than alternative managed care models—only that it is more effective than the way the military used to deliver health care.

Because most of the expected cost savings and improvements in access and quality are purportedly due to features of the Prime option, estimates of cost, access, and quality are broken out, whenever possible, by beneficiaries' enrollment status [i.e., enrolled with a military Primary Care Manager (PCM), enrolled with a civilian PCM, or not enrolled].

Whenever possible, an attempt is made to discern the reasons for any differences between the traditional and TRICARE systems. For example, the efficacy of the Prime option could be affected by favorable selection in the early stages of the TRICARE program. That is, beneficiaries who select the Prime option may be younger or healthier than the general Department of Defense (DoD) beneficiary population and, consequently, use fewer medical services (affecting cost) and have better treatment outcomes (affecting quality). Conversely, improved benefits under TRICARE may have attracted "ghost" beneficiaries back into the system, thereby increasing total costs. These and other effects will be investigated in an effort to understand the cost differences between the traditional system and TRICARE.

This report begins with some background information about the TRICARE program. That section is followed by the findings regarding the impact of TRICARE on beneficiary access to health care and on the quality of health care. Then come the findings regarding government and beneficiary costs, respectively. The main text presents the evaluation results for all TRICARE regions combined; the appendices present additional details by region.



## 2. BACKGROUND

TRICARE is the DoD's regional managed-care program for delivering health care to members of the Armed Services and their families, survivors, and retired members and their families. Congress has mandated that the program be modeled on HMO plans offered in the private sector and other similar government health-insurance programs. In addition, those who enroll in the HMO option are to have reduced out-of-pocket costs and a uniform benefit structure. Congress further directed that the TRICARE program be administered so that the costs incurred by the DoD are no greater than the costs that would otherwise have been incurred under the traditional benefit of direct care and CHAMPUS.

The program offers three choices to CHAMPUS-eligible beneficiaries. They can:

- receive care from civilian providers under "TRICARE Standard" (same as standard CHAMPUS),
- use a network of civilian preferred providers on a case-by-case basis under "TRICARE Extra," or
- enroll in an HMO-like program called "TRICARE Prime."

TRICARE is administered on a regional basis. The country is divided into 11 geographical regions, as shown in Figure 2-1, and a Military Treatment Facility (MTF) commander in each region is designated as Lead Agent. The Lead Agents are responsible for coordinating care within their regions. They ensure the appropriate referral of patients between the direct-care system and civilian providers and have oversight responsibility for delivering care to both active-duty and non-active-duty beneficiaries.



Figure 2-1. TRICARE Health Service Regions, Lead Agents, and Contractors

Because of the size and complexity of the program, the DoD phased in the implementation of TRICARE region-by-region over approximately a 3-year period. Health care is arranged under a Managed Care Support (MCS) contract that supplements the care provided in MTFs. Table 2-1 shows the MCS health care delivery start dates and the number of beneficiaries enrolled under active contracts, by region, as of July 2000. The current evaluation covers Regions 3, 4, 6, 7/8, 9, 10, 11, and 12.

**Table 2-1. TRICARE Enrollment Status (July 2000)**

TRICARE Region	Beneficiary Population	Prime Start Date	Enrollment		
			Active Duty	Active Duty Family Members	Retirees and Family Members
1. Northeast	1,036,189	Jun 98	136,476	175,459	129,131
2. Mid-Atlantic	839,300	May 98	136,511	219,723	69,305
3. Southeast	1,068,362	Jul 96	105,593	198,777	141,322
4. Gulf South	596,742	Jul 96	53,555	103,142	76,631
5. Heartland	663,879	May 98	64,501	105,799	62,281
6. Southwest	968,165	Nov 95	117,213	212,543	152,571
7/8. Central	1,097,740	Apr 97	136,072	217,222	134,813
9. Southern California	617,838	Apr 96	82,585	149,110	69,070
10. Golden Gate	274,337	Apr 96	18,207	40,342	39,271
11. Northwest	374,468	Mar 95	39,609	87,188	64,480
12. Pacific (Hawaii)	148,472	Apr 96	30,789	55,713	10,382
Western Pacific	168,636	Oct 96	96,301	58,974	328
Alaska	70,649	Oct 97	17,797	25,056	8,586
Europe	299,877	Oct 96	109,838	129,909	577
Latin America	38,032	Oct 96	5,957	9,763	0

Note: Beneficiary population as of January 2000 from "TRICARE Regions at-a-Glance" report dated 17 July 2000. Enrollment figures as of July 2000 from Defense Enrollment Eligibility Reporting System.

## 2.1 The Three TRICARE Options

TRICARE offers beneficiaries three options—Standard, Extra, and Prime. The following subsections provide descriptions of each option. Table 2-2 shows the cost-sharing features of the three options.

### 2.1.1 Standard

TRICARE Standard is the new name for the health care option formerly known as CHAMPUS (a DoD-administered indemnity plan). All persons eligible for military health care, except active-duty members and most Medicare-eligible beneficiaries, can use TRICARE Standard. No enrollment is required. Under this option, eligible beneficiaries can choose any civilian physician they want for health care, and the government will pay a percentage of the cost.

For active-duty families, TRICARE Standard pays 80 percent of the CHAMPUS Maximum Allowable Charge (CMAC) for outpatient health care after the annual deductible has been met. For retirees and their families, TRICARE Standard pays 75 percent of the CMAC.

Active-duty family members pay \$10.85 per day or a \$25 minimum fee for inpatient care at civilian hospitals. Retiree families pay considerably more: \$390 per day or 25 percent of the charges, whichever is less. Also, retiree families must pay 25 percent of the cost for any separately billed physician and professional fees, which can amount to an additional, several hundred dollars per day.

Beneficiaries can seek care from a military hospital or clinic before receiving care from civilian sources (beneficiaries residing in a catchment area *must* first seek care from a military hospital for inpatient care and for selected outpatient procedures). Outpatient visits, when available, are free, as are prescriptions filled at the MTF pharmacy. For inpatient care, MTFs charge flat fees of \$7.50 per day for active-duty personnel and retired officers; retired enlisted personnel are exempted. All others pay \$10.85 per day. Finally, TRICARE Prime enrollees receive first priority for care in MTFs.

### **2.1.2 Extra**

All persons eligible for military health care, except active-duty and most Medicare-eligible beneficiaries, can use a network of preferred providers under TRICARE Extra. Like TRICARE Standard, no enrollment is required for TRICARE Extra. Beneficiaries simply use the network providers, who have agreed to charge a discounted rate for medical treatment and procedures. The rates are discounted from the CMACs, as agreed upon with the MCS contractor.

As with TRICARE Standard, the government shares the costs of health care. For using this network of preferred providers, the government pays an additional 5 percent of outpatient costs incurred. This saving applies equally to active-duty families and retirees, raising the government's cost shares to 85 percent and 80 percent, respectively. Although outpatient costs are subject to a deductible, prescriptions filled under Extra receive first-dollar coverage (unlike prescriptions filled under Standard). Health-care providers participating in the Extra network also agree to use the allowable rate schedule (based on a discount from the CMAC rates), so the beneficiaries do not incur any additional charges.

Another advantage of TRICARE Extra is that participating providers will always file claims for the patient. With TRICARE Standard, some eligible beneficiaries may occasionally have to pay for their health care first and then apply for reimbursement. With TRICARE Extra, the participating provider is paid directly by the MCS contractor, requiring the patient to pay only the cost share amount at time of treatment.

Beneficiaries can also use a combination of health care professionals—some who are part of the Extra network and others who are not. Because there is no formal enrollment in either TRICARE Standard or TRICARE Extra, beneficiaries are free to switch back and forth among providers as they prefer. Beneficiaries can continue to seek care from a military hospital or clinic on a space-available basis. They can also seek care from civilian sources subject to the same restrictions for beneficiaries residing in catchment areas.

**Table 2-2. TRICARE Cost-Sharing Features**

	TRICARE Prime	TRICARE Extra	TRICARE Standard
<b>Choice of civilian doctors, hospitals, clinics</b>	Must choose from government-approved network	Can choose from government-approved network for lower cost	Unlimited
<b>Annual enrollment fees</b>			
All active duty <sup>a</sup>	None	None	None
Retirees	Individual: \$230 Family: \$460	None	None
<b>Annual outpatient deductibles</b>			
E-4 and below <sup>a</sup>	None	Individual: \$50 Family: \$100	Individual: \$50 Family: \$100
All other active duty <sup>a</sup>	None	Individual: \$150 Family: \$300	Individual: \$150 Family: \$300
Retirees	None	Individual: \$150 Family: \$300	Individual: \$150 Family: \$300
<b>Catastrophic cap</b>			
All active duty <sup>a</sup>	\$1,000	\$1,000	\$1,000
Retirees	\$3,000	\$7,500	\$7,500
<b>Copayments for visit to civilian doctor</b>			
E-4 and below <sup>a</sup>	\$6	15 percent <sup>c</sup>	20 percent <sup>b</sup>
All other active duty <sup>a</sup>	\$12	15 percent <sup>c</sup>	20 percent <sup>b</sup>
Retirees	\$12	20 percent <sup>c</sup>	25 percent <sup>b</sup>
<b>Prescription drugs (retail network)</b>			
All active duty <sup>a</sup>	\$5	15 percent <sup>c</sup>	20 percent <sup>b</sup>
Retirees	\$9	20 percent <sup>c</sup>	25 percent <sup>b</sup>
<b>Mail order pharmacy</b>			
All active duty <sup>a</sup>	\$4 for up to a 90-day supply	\$4 for up to a 90-day supply	\$4 for up to a 90-day supply
Retirees	\$8 for up to a 90-day supply	\$8 for up to a 90-day supply	\$8 for up to a 90-day supply

**Table 2-2 (Continued)**

	TRICARE Prime	TRICARE Extra	TRICARE Standard
<b>Copayments at civilian hospitals for inpatient care</b>			
All active duty <sup>a</sup>	\$11 per day (\$25 minimum per stay); \$20 per day for mental health	\$10.85 per day (\$25 minimum per stay); \$20 per day for mental health	\$10.85 per day (\$25 minimum per stay); \$20 per day for mental health
Retirees	\$11 per day (\$25 minimum per stay); \$40 per day for mental health	Less of \$250 per day or 25 percent of hospital charges, plus 20 percent of professional fees; for mental health, 20 percent of all charges <sup>c</sup>	Lesser of \$390 per day or 25 percent of hospital charges, plus 25 percent of professional fees; for mental health, lesser of \$144 per day or 25 percent of all charges <sup>b</sup>
<b>Ambulance service</b>			
E-4 and below <sup>a</sup>	\$10	15 percent <sup>c</sup>	20 percent <sup>b</sup>
All other active duty <sup>a</sup>	\$15	15 percent <sup>c</sup>	20 percent <sup>b</sup>
Retirees	\$20	20 percent <sup>c</sup>	25 percent <sup>b</sup>
<b>Outpatient surgery</b>			
All active duty <sup>a</sup>	\$25	\$25	\$25
Retirees	\$25	20 percent <sup>c</sup>	25 percent <sup>b</sup>
<b>Preventive services</b>	\$0	Not covered	Not covered
<b>Medical equipment patient takes home</b>			
E-4 and below <sup>a</sup>	10 percent <sup>b</sup>	15 percent <sup>c</sup>	20 percent <sup>b</sup>
All other active duty <sup>a</sup>	15 percent <sup>b</sup>	15 percent <sup>c</sup>	20 percent <sup>b</sup>
Retirees	20 percent <sup>b</sup>	20 percent <sup>c</sup>	25 percent <sup>b</sup>

Source: Adapted from *TRICARE Manual for Basic and Advanced Course*, May 13, 2000 and *TRICARE Special: A User's Guide*, Special Section in *Army Times*, *Navy Times*, *Air Force Times*, March 6, 2000.

<sup>a</sup> Figures in the table apply to active-duty family members only. For active-duty service members, care is generally available at MTFs only. All such care is free except for a \$7.50 daily subsistence fee for inpatient stays.

<sup>b</sup> Percentages are applied to the CMAC. In addition, for non-participating providers, beneficiaries pay the excess above the CMAC; however, providers are forbidden by law from charging more than 115 percent of the CMAC.

<sup>c</sup> Percentages are applied to the negotiated amount, which is less than the CMAC.

### **2.1.3 Prime**

All active-duty military personnel are automatically enrolled in TRICARE Prime at their nearest MTF. All other persons eligible for military health care, except Medicare-eligibles, can enroll in TRICARE Prime. Enrollment is open at all times and is not restricted to any "open season." There are also no restrictions on enrollment based on pre-existing medical conditions.

Medicare-eligible retirees are not ordinarily eligible to enroll in Prime. However, this rule is being relaxed at six sites under the TRICARE Senior Project. Under this program, Medicare-eligible retirees will be able to enroll at selected MTFs, and the DoD will receive reimbursement from the Department of Health and Human Services (DHHS). Medicare rates are approximately equal to the CMAC rates and are typically higher than the discounted rates offered by network providers. Reimbursement will begin only after the DoD has expended the historical level of resources provided to care for Medicare-eligible beneficiaries. The two departments will work together to monitor the program and determine whether its expansion to other sites would prove cost effective.

Each enrollee chooses or is assigned a PCM. The PCM is a health-care professional or medical team that patients see first for their health-care needs. PCMs are supported by military and civilian medical specialists to whom patients are referred if they need specialty care. Referrals are facilitated by a Health Care Finder (HCF), a contractor employee who coordinates with the PCM to help beneficiaries find specialty care in the civilian community when the needs of the patient cannot be met by the MTF (HCF services are available to all beneficiaries, not just those enrolled in Prime). Depending on the enrollees' status, the locale, and the availability of medical professionals, they can either select a PCM at a nearby military hospital or clinic or request a civilian professional who is a member of the contracted Prime network in a nearby community. In some cases, the Lead Agent may either direct patients to a military PCM at an MTF if there is unused capacity or assign them a civilian PCM if MTF capacity is exceeded.<sup>2</sup>

All beneficiaries enrolled in TRICARE Prime are guaranteed access to care according to strict time standards. Emergency services are available within the Prime service area 24 hours per day, 7 days per week. Primary care should be available within a 30-minute drive from the beneficiary's home. The maximum waiting times for primary-care appointments are 1 day for acute care; 1 week for routine, non-urgent care; and 4 weeks for health maintenance and preventive care. Specialty care should be available within a 1-hour drive from home, and the maximum waiting time for specialty-care appointments is 4 weeks.

Retirees and their families pay a fee of \$230 per year to enroll in Prime, with a \$460 family cap. In return for these fees, enrollees make nominal copayments and are not required to meet a deductible. TRICARE Prime covers a variety of preventive and wellness services. Examples of such services include eye examinations, immunizations,

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<sup>2</sup> Throughout this report, the term "military PCM" refers to a provider at a military facility, regardless of whether the provider is in the uniformed services or a civilian. Similarly, the term "civilian PCM" refers to a provider at a network facility.

hearing tests, mammography, Pap smears, prostate examinations, and other cancer-prevention and early-diagnosis examinations. All clinical preventive services are free under Prime, whether performed at an MTF or at a network facility.

Non-active-duty Prime enrollees can seek care from non-network providers through a point-of-service (POS) option, but they must pay a substantial penalty in the form of an even higher cost share than under TRICARE Standard.

#### **2.1.4 Overseas Programs**

TRICARE overseas programs have been implemented in Europe, the Western Pacific, Alaska, and Latin America under agreements with individual providers rather than through at-risk contractors. On October 1, 1999, the TRICARE Prime option was extended to Puerto Rico as well. TRICARE overseas offers two options: Prime and Standard. The Prime option is currently open to all active-duty personnel and family members who choose to enroll. The Prime benefit is the same as in the United States, except that the copayment is waived (except in Alaska) for family members who must obtain care from host-nation sources.

## **2.2 Supplemental Programs**

Beginning in FY 1998, the DoD introduced several new programs that could potentially affect subsequent evaluations of the TRICARE program. The new programs are:

- TRICARE Senior (Medicare subvention) demonstration,
- TRICARE Senior Supplement demonstration,
- TRICARE Dental Program,
- National Mail Order Pharmacy program,
- Federal Employees Health Benefits Program demonstration,
- TRICARE Prime Remote, and
- Pharmacy Redesign Pilot Program.

TRICARE Senior and the National Mail Order Pharmacy programs began operations in 1998 while the remaining programs are scheduled to be implemented in FY 2000 or later. A brief description of each program follows.

### **2.2.1 Medicare Subvention Demonstration**

In February 1998, the DHHS, the Health Care Financing Administration (HCFA), the DoD, and the OASD(HA) completed a Memorandum of Agreement to conduct a demonstration, or test project, under which the DHHS would reimburse the DoD from the Medicare Trust Fund for certain health care services provided to Medicare-eligible military (dual-eligible) beneficiaries at MTFs or through contracts. The program, called TRICARE Senior Prime (TSP), was authorized by Section 1896 of the Social Security Act, amended by Section 4015 of the Balanced Budget Act of 1997 (Public Law 105-33) and amended a second time by The Balanced Budget Refinement Act of 1999. The demonstration was ultimately designed to test the feasibility of establishing Medicare managed care plans within the DoD TRICARE program for dual-eligible beneficiaries. These TSP plans are intended to expand access to military health care services, enhance



the quality of health care delivery, and maintain budget neutrality. The statute authorized the DoD and the DHHS to conduct a 3-year Medicare Subvention Demonstration. Without legislation to extend or expand the demonstration, it is scheduled to end in December 2000.

The original legislation authorized two types of health care delivery systems: TRICARE Senior Prime and Medicare Partners. Under TRICARE Senior Prime, the Medicare program treats the DoD and its Military Health System (MHS) similar to a Medicare+Choice plan for dual-eligible Medicare/DoD beneficiaries. Medicare will pay for dual-eligibles enrolled in the DoD managed care program after DoD meets its current level of effort, measured in terms of health care expenditures for the dual-eligible population. Medicare-eligible military retirees who enroll in the program must select a PCM at the MTF. Enrollees are referred to specialty care providers at the MTF and to participating members of the existing TRICARE Prime network. TRICARE Senior Prime enrollees are afforded the same priority access to MTF care as military retiree families enrolled in TRICARE Prime. Under Medicare Partners, DoD will receive payment from Medicare+Choice plans whenever DoD enters into a contract with a Medicare+Choice Organization and provides inpatient or physician specialty care services to dual-eligible beneficiaries enrolled in those plans. No Medicare Partners agreement has been established to date, and will probably not be established before the end of this calendar year.

Under Medicare subvention, the DoD, for the first time, is able to enroll its Medicare-eligible retirees into the TRICARE Prime program (as a TRICARE Senior Prime beneficiary), and receive Medicare reimbursement. The Secretary of Defense and the Secretary of Health and Human Services selected six demonstration sites to test this TRICARE initiative in 1998. Eligible beneficiaries can enroll in TRICARE Senior Prime during the annual open enrollment period or by "aging-in"<sup>3</sup> to the program. Table 2-3 shows the health care delivery start dates, the number of eligible beneficiaries enrolled by open enrollment and "aging-in" to the program, and MTF capacity for this program by region.

The MTFs participating in the demonstration were required to apply and be approved as Medicare+Choice organizations. Military retirees enrolling in the demonstration must have received some care from military providers in the past or have become Medicare-eligible after December 31, 1997. Also, TRICARE Senior Prime enrollees must

- be age 65 or older,
- live within the geographic service area,
- be eligible for care in the MTF and also eligible for Medicare on the basis of age,
- be enrolled in Medicare Parts A and B,
- continue to pay monthly Medicare Part B premiums, and
- agree to have all their care provided by or coordinated through their PCM.

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<sup>3</sup> Beneficiaries enrolled in TRICARE Prime with a military PCM at one of the demonstration sites are offered enrollment in TRICARE Senior Prime when they become Medicare eligible (usually at age 65). This is called "aging-in" enrollment.



Beneficiaries in TRICARE Senior Prime do not pay the annual TRICARE Prime enrollment fee. To participate in Medicare Partners, a military retiree must be enrolled in a Medicare+Choice plan that contracts with one of the participating MTFs.

**Table 2-3. TRICARE Senior Prime Status (July 2000)**

Region/ Demonstration Site	Eligible Population <sup>a</sup>	Start Date	Enrollment			
			Open	Open and Aged-In	TSP Capacity at Facility	Open as Percent of Capacity <sup>b</sup>
2. Dover AFB	3,905	1/1/99	931	1,002	1,500	62.1%
4. Keesler AFB	7,361	12/1/98	2,777	3,357	3,100	89.6
6. Brooke Army Medical Center/ Wilford Hall Medical Center	34,148	10/1/98	9,944	12,065	10,000	99.4
Texoma (Sheppard AFB/Fort Sill)	7,067	12/1/98	2,075	2,438	2,700	76.9
8. Ft. Carson/Air Force Academy/Peterson AFB	13,689	1/1/99	3,184	3,935	3,200	99.5
9. Naval Medical Center, San Diego	35,619	11/1/98	3,972	4,600	4,000	99.3
11. Madigan Army Medical Center	21,709	9/1/98	3,313	4,431	3,300	100.4

<sup>a</sup> Beneficiary counts reflect total number of beneficiaries eligible for open enrollment as of 2nd quarter, FY 1998.

<sup>b</sup> The number of enrolled TSP members may exceed TSP capacity, as "aged-in" does not count towards TSP capacity.

Health care delivery under TRICARE Senior began on September 1, 1998 at Madigan Army Medical Center. All six demonstration sites had begun health care delivery as of January 1, 1999. Because this program is available at only a few sites with small enrollment, its impact on this year's evaluation should be minimal.

### **2.2.2 TRICARE Senior Supplement Demonstration**

The Department of Defense (DoD) will implement the TRICARE Senior Supplement Demonstration Program to facilitate DoD payments on behalf of Military Health System (MHS) beneficiaries receiving Medicare benefits while enrolled in the TRICARE Program as a supplement to Medicare. The Supplement Demonstration, which offers enrolled members benefits similar to TRICARE Extra and Standard, serves as a secondary payer for Medicare coverage, reducing or eliminating most out of pocket expenses, and providing reimbursement for some services not covered by the Medicare program. Benefits of enrollment include access to the National Mail Order Pharmacy (see Section 2.2.4), use of TRICARE civilian network pharmacies, coverage for certain diagnostic and preventive services, extended mental health coverage, and coverage for health care services delivered outside the Continental United States.

While enrolled in the demonstration, enrollees may not receive health care, including pharmacy services, in military hospitals or clinics. Each eligible beneficiary who enrolls in the TRICARE Program under the TRICARE Senior Supplement Demonstration Program will pay an annual enrollment fee of \$576. The demonstration program will run from April 1, 2000 to December 31, 2002.

To be eligible for the program, an enrollee must be a retired member of the Uniformed Services, a family member of a retired member of the Uniformed Services, or a survivor of a member of the Uniformed Services who died while serving on active duty for a period of at least 30 days. The enrollee must also be age 65 or older, eligible for Medicare Part A (Hospital Insurance), enrolled in Medicare Part B (Supplemental Medical Insurance), and reside in one of the demonstration sites. The selected demonstration program areas are Santa Clara, California, and Cherokee, Texas. As of July 31, 2000, this program has over 300 enrollees.

### **2.2.3 TRICARE Dental Program**

The TRICARE Dental Program (TDP), awarded to United Concordia Companies, Inc. in April 2000, will be implemented and start health care delivery on February 1, 2001. The TDP combines the TRICARE Family Member Dental Plan (TFMDP) and the TRICARE Selected Reserve Dental Program (TSRDP). The TDP offers improved dental coverage for 3.1 million active duty family members, Selected Reserve, Individual Ready Reserve and their family members worldwide. It is a comprehensive, portable and affordable dental program that focuses on customer satisfaction through a contractor incentive program.

The five-year TDP contract contains many enhancements to the current TFMDP. The lock-in period for enrollment has decreased to 12 months and incorporates a contingency lock-in waiver for Reservists called up to active duty with less than twelve months remaining. It increases the annual maximum benefit coverage to \$1,200 and the lifetime maximum for orthodontic care to \$1,500. It also decreases cost shares for some procedures for junior enlisted personnel (paygrade E1 to E4). Enrollment in the TDP is voluntary and portable worldwide and current TFMDP and TRSDP enrollees will be automatically enrolled in the TDP. The contractor will handle all enrollments and direct bill enrollees for premiums in the absence of a payroll account.

The TDP is a comprehensive benefit package that builds on the TFMDP benefit package. Some of the additions to the TDP benefit package include general anesthesia, intravenous sedation, occlusal guards, athletic mouthpieces, additional oral evaluation per year, pulp vitality tests, sealants raised to age 18, orthodontic coverage for children raised to age 20, or 22 if enrolled in college, orthodontic coverage for spouses raised to age 22, and porcelain veneers and bleaching of discolorization on anterior teeth. The TDP also emphasizes diagnostic and preventive care, advancement of pediatric and adolescent oral health, and increased utilization by beneficiaries by providing positive and negative incentives to the contractor for improvements in these areas especially for those age 17 and under.

### **2.2.4 National Mail Order Pharmacy Program**

In October 1997, the DoD contracted with Merck-Medco Managed Care to operate a National Mail Order Pharmacy (NMOP) program. The mail-order services provided by the individual MCS contractors are being consolidated, region by region, with the NMOP in an attempt to simplify ordering maintenance prescriptions by mail and reduce costs. Beneficiaries can still use the walk-in services of MTF or contractor pharmacies.

The following beneficiaries are eligible to participate in the NMOP:

- All active-duty service members worldwide,
- CHAMPUS-eligible beneficiaries residing in the Continental United States,
- Overseas CHAMPUS-eligibles with APO or FPO addresses,
- Medicare-eligible patients affected by a BRAC action (overseas beneficiaries must have an APO/FPO address),
- Medicare-eligible retirees enrolled in TRICARE Senior, and
- Uniformed Services Family Health Plan enrollees.

Beneficiaries can receive up to a 90-day supply of non-controlled medications and up to a 30-day supply of controlled medications. The service is free for active-duty service members, but there is a \$4 copayment per prescription for active-duty family members and an \$8 copayment per prescription for retirees and their family members. There are no deductibles for prescriptions filled through the NMOP.

The Pharmacy Data Transaction Service (PDTS) was activated within retail pharmacy networks and the NMOP program between July and September 2000. MTFs will begin activation between December 2000 and June 2001. The PDTS enhances patient safety by merging patient medication information from these disparate dispensing locations into a single data repository. Along with enhanced safety, the PDTS provides a robust reporting capability on pharmacy utilization.

### ***2.2.5 Federal Employees Health Benefits Program Demonstration***

In accordance with the National Defense Authorization Act for FY 1999, the DoD and the Office of Personnel Management have developed a demonstration program that allows some MHS beneficiaries to enroll with the Federal Employees Health Benefits Program (FEHBP) for their health care. The demonstration, which provides medical care for up to 66,000 retirees and their family members, gives the DoD an opportunity to collect valuable information about the cost and feasibility of alternative approaches to improving the access to health care for those beneficiaries.

The DoD initially selected eight sites for the FEHBP demonstration:

- Dover Air Force Base, Delaware;
- Commonwealth of Puerto Rico;
- Fort Knox, Kentucky;
- Greensboro/Winston-Salem/High Point, North Carolina;
- Dallas, Texas;
- Humboldt County, California area;
- Naval Hospital, Camp Pendleton, California; and
- New Orleans, Louisiana.

Under the demonstration, eligible beneficiaries can join the FEHBP during the enrollment open season in November of each year. Eligible beneficiaries include retirees over the age of 65 who are Medicare-eligible and their family members, former spouses

of military members who have not remarried, and family members of deceased members or former members. Medicare eligibility is not required for the family members of retirees and the latter two groups. Coverage began in January 2000 and is scheduled to end in December 2002.

Beneficiaries must enroll in an FEHBP plan and pay any applicable premiums to receive benefits. During the demonstration, enrollees cannot use MTFs for any services. Premiums will be based on a separate risk pool for MHS beneficiaries. The government's contribution will be computed in the same way as it is currently done under the FEHBP. As of July 31, 2000, beneficiaries enrolled in FEHBP totaled 2,655.

In May 2000, the DoD announced it was expanding the FEHBP demonstration program to areas surrounding Coffee County, Georgia and Adair County, Iowa. The former site includes parts of Georgia, Florida and South Carolina; the latter site encompasses the entire state of Iowa (except within the Offutt Air Force Base catchment area), parts of Minnesota, South Dakota, Nebraska, Kansas and Missouri. The expanded demonstration will target about 25,000 eligible beneficiaries in each location, increasing to almost 120,000 the number of beneficiaries eligible for the demonstration. Coverage for new participants will begin in January 2001.

#### **2.2.6 TRICARE Prime Remote**

Section 731 of the FY 1998 National Defense Authorization Act directed the DoD to provide TRICARE Prime-like benefits to Active Duty Service Members (ADSM) nationwide who work and live more than 50 miles from a military hospital or clinic.

In 1998, DoD issued a policy that members who meet the distance criteria above are immediately eligible for TRICARE benefits (with no deductible or cost-shares). Concurrently, DoD initiated contract modifications with every TRICARE managed care support contractor to introduce a standardized benefit for active duty service members nation-wide. This contract modification is known as the "TRICARE Prime Remote" program, and began October 1, 1999. As of July 31, 2000, there were 42,164 active-duty service members enrolled in the program, out of 47,028 eligibles (90 percent).

The TRICARE Prime Remote (TPR) program provides active duty service members with a TRICARE Prime-like benefit when stationed away from traditional sources for military health care. Where civilian Prime service areas exist, active duty members are enrolled to a civilian PCM. Where there are no Prime networks, active duty members may use any TRICARE authorized provider in the local community. No pre-authorization is required for primary care. A joint service office, known as the Military Medical Support Office (MMSO), provides the medical readiness reviews and fitness for duty oversight for specialty health care delivered by civilian providers. MMSO, based at Great Lakes Naval Station, IL, has been established and is providing 24-hour, 7 day per week coverage. The managed care support contractors provide enrollment services, Health Care Finder support and claims processing functions for service personnel enrolled in TPR. Active duty service members bear no costs for obtaining health care from civilian sources.

The 1998 law did not require, and the current contract modification does not include, the extension of "TRICARE Prime-like benefits" to the family members of active-duty

service members who accompany their sponsors to remote duty locations. A separate provision in the law (Section 712) required the DoD to study alternatives to extending the Prime benefit to family members who accompany the active-duty service member to a remote site. In August, 1999, the ASD(HA) submitted a report to Congress outlining TPR's actions to date and providing the cost estimate for extending TRICARE Prime copayments to remote family members. A provision to extend coverage to active-duty family members is included in both the House and Senate versions of the FY 2001 Defense Bill. Until an alternative is selected, active duty families remain eligible for TRICARE Standard.

### ***2.2.7 Pharmacy Redesign Pilot Program***

The DoD recently implemented a Pharmacy Benefit Pilot Program for DoD beneficiaries over the age of 65. This is taking place at two locations that were selected randomly after meeting congressionally mandated selection criteria. The pilot locations are Fleming, Kentucky and Okeechobee, Florida.

An eligible beneficiary is described as a member or former member of the Uniformed Services; a dependent of the member or former member of the Uniformed Services; or a dependent of a member of the Uniformed Services who died while serving on active duty for a period of at least 30 days, who meets the following requirements: (a) is 65 years of age or older, (b) is entitled to hospital insurance benefits under Medicare Part A (c) is enrolled in the supplemental medical insurance program under Medicare Part B, and (d) who resides in a pilot area.

The benefit for eligible beneficiaries will be equivalent to the TRICARE Extra pharmacy benefit with a \$200 enrollment fee plus the applicable copayments. The copayments are 20 percent for up to a 30-day supply of medication from a TRICARE retail network pharmacy or \$8 for up to a 90-day supply of medication from the NMOP.

### **3. ACCESS TO AND QUALITY OF HEALTH CARE UNDER TRICARE**

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The FY 1998<sup>4</sup> and 1999<sup>5</sup> evaluations measured changes in the TRICARE regions for which a full year of data under TRICARE was available. In summary, the results of the evaluations showed that under TRICARE:

- Access improved, and
- Most quality-of-care goals were met or nearly met.

The current FY 2000 evaluation looks at changes in 8 regions that have now been online for at least 1 year and have sufficient data for analysis. In addition, trends from 1994 to 1998 in access and quality of care in these regions are examined. Comparisons of satisfaction with health care under the DoD system to civilian health plans are also shown.

#### **3.1 Methods and Data Sources**

##### **3.1.1 General Method**

This year's evaluation of TRICARE's effects on the access to and quality of health care expands on the methodology that was used in previous years. In addition to measuring change from a pre-TRICARE base year to the current year, trends that include the intervening years are examined. Additionally, the DoD population was compared with the general U.S. population on various aspects of satisfaction with health care.

The evaluation uses data on access and quality of care collected before TRICARE was implemented in any region (1994) and after TRICARE had been enrolling people in Prime for about 1 year. Because the date of TRICARE enrollment differed across regions, the time between the baseline period and the follow-up also varied. The choice of the baseline period was, to a great extent, determined by the data available for the evaluation.

To isolate the effects of the TRICARE program, it was necessary to control for possible changes in the beneficiary population over time that could also affect access. These effects were controlled by statistical regression analysis. The control variables included measures of health status of the population and various demographic characteristics. The summary data reported here are estimated from regression models, which hold health status and demographics constant at the FY 1998 population means. This allows an estimation of how the current (FY 1998) population would have perceived access and quality factors in FY 1994, in the absence of TRICARE.

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<sup>4</sup> Peter H. Stoloff, Philip M. Lurie, Matthew S. Goldberg, Richard D. Miller, and Ravi Sharma, *Evaluation of the TRICARE Program: FY 1998 Report to Congress*, 18 September 1998.

<sup>5</sup> Peter H. Stoloff, Philip M. Lurie, Lawrence Goldberg, and Matthew S. Goldberg, *Evaluation of the TRICARE Program: FY 1999 Report to Congress*, 31 October 1999.



The initial intention was to construct a quasi-control group from which inferences could be made on how access and quality would have been experienced under *status quo* conditions—had TRICARE not been implemented. The aim in constructing a quasi-control group is to find a subpopulation of beneficiaries who were unaffected by TRICARE.

The use of a control group would allow for the separation of the effects of changes that would have occurred in the absence of TRICARE. For example, suppose there were advances in telephone appointment technology that would have been implemented even if the current TRICARE system did not exist. Further, suppose that this system would remove barriers to making medical appointments, which would, in turn, reduce waiting time for an appointment by 1 day. At the same time, suppose that measures, before and after TRICARE implementation, of the number of days people wait for an appointment shows an improvement of 2 days. The reduction in days waiting for a medical appointment *attributable to TRICARE* would actually be only 1 day after the exogenous effect is removed.

After statistical investigation, however, no group that was unaffected by the TRICARE program in FY 1998 could be identified. Therefore, it was necessary to use a before-and-after design for the current evaluation in lieu of one with a control group. This methodology compares measures of access and quality-of-care outcomes in 1998 with historical outcomes measured in 1994, before TRICARE was implemented anywhere. A disadvantage of a before-and-after design is the possible confounding of TRICARE effects with other influences.

Despite this shortcoming, the before-and-after procedure was used as the method of analysis, and all changes in outcome measures are being attributed to TRICARE. No one knows what would have happened in the absence of TRICARE.

### **3.1.2 Data Sources (DoD Surveys)**

The data come from the 1994, 1996, 1997, and 1998 administrations of the Health Care Survey of DoD Beneficiaries. The focus of the surveys was the perceived access to and quality of health care. The surveys sampled representative cross sections of all beneficiaries—regardless of whether they had used the health care system. This permits the possible identification of lack of access as the reason for not using the military health care system.

These surveys were not specifically designed to measure changes over time. This is evident from the different phrasing of questions and the different response scales used in the surveys. Other limitations of using the surveys to measure changes are related to the context in which perceptions about interactions with the health care system were elicited. Respondents were asked to evaluate access on the basis of experiences of the past 12 months. This becomes somewhat problematical when trying to isolate experiences since enrolling in Prime—which may have occurred within the past 12 months. For example, a response to the question, “Did you have trouble gaining access to health care during the past 12 months?” could be describing access before *or* after enrolling in Prime or both before *and* after enrolling.

While it was not possible to determine whether those enrolled in Prime for fewer than 12 months were responding to encounters with the medical system before or after enrollment, it was possible to compare responses of these enrollees with those who were enrolled for a full year (86 percent of Prime enrollees had been enrolled 12 or more months before being surveyed). Significant differences were found for 8 of the measures examined, as shown in Table 3-1.<sup>6</sup>

**Table 3-1. Effect of Time Enrolled in Prime During FY 1998 on Selected Outcomes**

Outcome Measure <sup>a</sup>	Months Enrolled	
	Less Than 12	12 and Greater
Met minor appointment wait goal	0.73	0.82
Met HP2000 <sup>b</sup> goal for physical exam	0.58	0.52
Believes TRICARE improves preventive care	0.78	0.71
Met HP2000 goal for dental checkup	0.57	0.63
Met HP2000 goal for flu shot	0.85	0.64
Met routine appointment wait goal	0.93	0.90
Days waited for minor care appointment	3.14	2.68
Met minor appointment wait goal	0.73	0.82

<sup>a</sup> Significant difference on outcome for those enrolled less than 12 months.

<sup>b</sup> *Healthy People 2000*.

Based on the similar response patterns of these two groups of Prime enrollees, the responses of all Prime enrollees were treated as if they had been enrolled for the entire period.<sup>7</sup>

Most items in the 1994 survey had counterparts in the later surveys. Where the response alternatives differed for similar questions in the two surveys, the responses were rescaled for comparability. In some cases, this resulted in a loss of information. For example, in 1994, respondents were asked how long they had to wait between making a “generic” appointment and seeing their provider. In 1996, the question was refined to elicit wait-times for urgent and routine appointments and care for chronic problems and minor illnesses. When measuring change, it was necessary to collapse (or average) wait-times for the four different kinds of appointments in 1996 to be comparable to what was asked in 1994. In addition to reporting differences from 1994 to 1998 in the rescaled wait-time, the 1998 data are reported at the greater level of detail.

The survey used a variety of response scales. Satisfaction items were typically five-point scales, anchored by response alternatives “very satisfied” and “very

<sup>6</sup> Regression analyses were performed to test the significance of the coefficient of an indicator variable whose value was set to 0 if an individual had been enrolled less than 12 months when responding to the survey, or to 1 if the individual had been enrolled for the entire time. The full set of demographic control variables was also included.

<sup>7</sup> It was not possible to use a variable, such as “time enrolled in Prime,” to control for bias associated with the ambiguity. The analysis compares future Prime enrollees in 1994 (those who will subsequently enroll) with Prime enrollees in 1998. A time-enrolled variable does not apply to those in the 1994 survey group; i.e., there would be zero variance for this group.



dissatisfied.” Responses to these items were transformed to a two-point (dichotomous) scale of “satisfied” and “not satisfied.”<sup>8</sup> Items thus transformed can then be reported in terms of the proportion of respondents who were “satisfied.”

### 3.1.3 Subpopulations

Health-care beneficiaries were placed into four mutually exclusive and exhaustive *subpopulation* groups based on their Active duty status and source of health care:

- *Active duty.* Composed of survey respondents who were on Active duty (AD) when they completed a survey.
- *Prime.* Composed of 1994 non-AD [active-duty family members (ADFM) and retirees] survey respondents who subsequently enrolled<sup>9</sup> in Prime when the option became available (future enrollees), plus 1996–1998 non-AD survey respondents who enrolled in Prime before responding to the survey.<sup>10</sup>
- *All civilian care.* Composed of nonenrolled respondents who reported never having used an MTF during the survey recall period.
- *Other not enrolled.* Composed of nonenrolled respondents who received some of their care at MTFs as space-available care during the survey recall period and who may have received some of their care at civilian facilities.

Additional breakouts of the beneficiary population are provided based on whether the beneficiary was *retired* from the service, and for Prime enrollees, whether their PCM was military or civilian. Membership in the retiree group is independent of the source of care (i.e., retirees are also included in one of the non-AD subpopulations).

Table 3-2 shows the distribution of subpopulations in the 8 regions represented in the survey samples (see Appendix A for a detailed breakdown). The values shown in parentheses represent the proportion of non-active-duty beneficiaries in the population, and sum to one (100 percent) within a fiscal year. These data suggest that there has been a shift over time from those using MTF space-available (MTF/SA) to TRICARE Prime and civilian care as their source of health care. On average, 14 percent fewer (0.22–0.36) non-AD people used MTF/SA as their source of care. This was paralleled by a 4- and 14-percent shift into the civilian-care-only (0.46–0.42) and TRICARE Prime categories (0.36–0.22), respectively, for non-AD beneficiaries. The 16 percent enrollment rate for those in the 1994 baseline sample is relatively low. This is partly because some active duty

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<sup>8</sup> Responses of “very satisfied” and “somewhat satisfied” were scored as *satisfied*, and responses of “somewhat dissatisfied” and “very dissatisfied” were scored as *not satisfied*. In most instances, responses of “neither satisfied nor dissatisfied” were dropped because of the low statistical reliability of these responses. Principal Components Analysis of item clusters showed significantly higher reliability of scales that did not include respondents with no opinion, or those “neither satisfied nor dissatisfied.” On an alternative response scale, responses of “excellent,” “very good,” and “good” were scored as *satisfied*; responses of “fair” and “poor” were scored as *not satisfied*.

<sup>9</sup> Subsequent enrollment in Prime by those in the 1994 sample was determined by searching the TRICARE Prime enrollment database maintained by the DoD.

<sup>10</sup> Includes those in the samples who may have also disenrolled before responding to the survey.

personnel subsequently leave the service prior to retirement and they and their family members are not eligible to join Prime.

The shift from space-available MTF care is a result of the introduction of managed care into the military environment. For the MTF to provide the health care benefits under the TRICARE Prime program, it was necessary to decrease space available care based on limited resources.

**Table 3-2. Distribution of Subpopulations Estimated from the 1994 and 1998 Samples—All Evaluated Regions Combined**

Military Status (Source of Care)	Proportion of Population			
	FY 1994		FY 1998	
	P(total)	P(non-AD)	P(total)	P(non-AD)
<i>Active duty</i> (All care)	0.24	—	0.22	—
<i>Non Active duty</i> (Prime care)	0.16 <sup>a</sup>	(0.22) <sup>a</sup>	0.28 <sup>b</sup>	(0.36) <sup>b</sup>
(Civilian-only care)	0.32	(0.42)	0.36	(0.46)
(Other not enrolled)	0.27	(0.36)	0.14	(0.18)
(Total)	0.76	(1.00)	0.78	(1.00)

<sup>a</sup> Proportion of non-AD who subsequently enrolled when Prime became available.

<sup>b</sup> Prime available in all regions sampled.

Regression analysis<sup>11</sup> was used to determine the statistical significance of the changes of the outcome variables over time and as the basis for estimating average values within subpopulations (as determined by military status source of care) for a given year. This was accomplished by using interaction terms between the year-of-survey variable and the indicator variables for the various subpopulations. Separate regression equations were estimated for each region. In addition, a regression equation aggregating over regions was also estimated.

The regression models were structured to isolate the effects of certain sources of variation in the access measures. The sources of variation accounted for include:

- Health status (SF-12 summary scales),
- Demographics (age, gender, ethnicity, marital status, education),
- Travel time to nearest MTF,
- In-catchment indicator, and
- Medical insurance coverage.

These controls, combined with indicator variables for “time” and subpopulation group (source of care and Active duty status of military sponsor), composed the explanatory variables used in the regression analyses.

<sup>11</sup> Logistic regression was used for dichotomous outcome measures, and ordinary least squares linear regression was used for continuous measures, such as “number of days waited for appointment.”

The survey data were weighted to adjust the sample composition to reflect the actual composition of the population more closely. The weight assigned to each respondent was related to the inverse probability of being in the sample. Using weighted data in regression analysis will often result in incorrect estimates of the standard errors and, hence, the significance levels of the coefficients. Although the weights have the desired effect of changing the means of the variables, they have the undesirable effect of underestimating the standard errors. The procedure suggested by Huber<sup>12</sup> and White<sup>13,14</sup> was used to correct the standard errors for design effects and possible lack of independence of errors produced by weighting and sample stratification.

Changes in outcomes were evaluated from two perspectives. Following the procedures used in earlier reports, current year outcomes were compared to those of the 1994, pre-TRICARE baseline. Because more regions have been under TRICARE than in previous years, there are now sufficient data to evaluate trends.

### 3.1.4 Evaluation of Trends

Changes in outcomes for pre-TRICARE<sup>15</sup>, one, two and three years after a region has begun enrolling people in Prime, were examined. Because the year of TRICARE startup varies across regions, the survey data used to represent an outcome for a person residing in a region under TRICARE for a particular amount of time will involve a different mix of regions and years. Table 3-3 shows which regions and survey year made up the "region maturity" groupings used in the analysis.

**Table 3-3. Data-Year and Region-Groups for Trend Analyses**

Years into TRICARE	Region							
	3	4	6	7/8	9	10	11	12
Baseline (1994)	1994	1994	1994	1994	1994	1994	1994	1994
+1	1998	1998	1997	1998	1997	1997	1996	1997
+2			1998		1998	1998	1997	1998
+3							1998	

### 3.1.5 Presentation Scheme

Over the course of the evaluation, an attempt was made to identify TRICARE effects that were common to the regions examined. The results shown in this section are

<sup>12</sup> Peter J. Huber, The behavior of maximum likelihood estimates under non-standard conditions. In *Proceedings of the Fifth Berkeley Symposium in Mathematical Statistics and Probability*. Berkeley, California: University of California Press, 1, 221-233, 1976.

<sup>13</sup> Halbert White, A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica* 48: 817-838, 1980.

<sup>14</sup> Halbert White, Maximum likelihood estimation of misspecified models. *Econometrica* 50: 1-25, 1982.

<sup>15</sup> Ideally, the pre-TRICARE measurement should be made in the same time interval for all regions; just prior to the region going online. However, because it is desired to identify those in the pre-TRICARE era who will eventually enroll in Prime, and these data were only available in 1994, that year was used as the baseline.

aggregate results that combine the data across regions. Appendices A through G show the results of parallel analyses performed at the regional level. However, significant departures from the aggregate results are identified.

Tables showing breakouts by subpopulation summarize results by beneficiary source of care. Although Active duty personnel are Prime enrollees, they are broken out separately. The column labeled *total* represents an estimate for the entire beneficiary population, regardless of source of care or military status.

### **3.2 Subpopulation Characteristics**

Population demographics and health status can moderate people's perceptions about health care and are related to the need for services. For example, analysis of the changes in perceptions of overall quality of care (all 8 regions combined) indicates a 7-percentage-point rise from 1994 to 1998. The age of the beneficiary is related to perceptions of overall quality—each year of age contributes 0.5 percentage point to the satisfaction level. The difference in the average ages of the 1994 and 1998 populations is 4 years, which accounts for 2 percentage points of the increase in satisfaction. Therefore, the TRICARE effect is actually a 5-percentage-point gain, after adjusting for age differences in the 1994 and 1998 populations.

Tables 3-4 and 3-5 show the changes in demographics over the evaluation period. In particular, beneficiaries in 1998 were:

- older,
- better educated,
- more likely to have private insurance,
- less likely to live in catchment,
- more likely to be married,
- healthier, and
- traveling farther to get to an MTF.

The increased travel time to an MTF and the higher likelihood of having private insurance were identified in last year's evaluation. The trends continue for a broader scope of the population (i.e., 8 regions). These and the other changes were statistically controlled for in this analysis. (See Appendix B for regional demographics.)

**Table 3-4. Comparison of Control Variables Between the 1994 and 1998 Populations—  
All Evaluated Regions and Groups Combined**

Measure	FY94	FY98
Married	0.76	0.79*
Age	46	50*
Male	0.52	0.54
Health status (mental)	52	53*
Health status (physical)	45	48*
Travel time to provider less than 30 minutes	0.87	0.83*
Hispanic	0.06	0.05
African American	0.09	0.09
High School graduate	0.73	0.68
College degree	0.22	0.28*
Other insurance	0.47	0.57*
Private insurance <sup>a</sup>	0.21	0.25*
Medicare (Part B)	0.17	0.19*
CHAMPUS supplemental insurance	0.14	0.41*
In catchment	0.72	0.66*

\* Indicates statistically significant change ( $p < .05$ ).

<sup>a</sup> Includes plans such as Blue Cross, Kaiser (HMO, or otherwise).

**Table 3-5. Control Variable Means in the 1998 Population—  
All Evaluated Regions Combined**

Measure	Military Status / Source of Care			
	Active Duty	Non-Active-Duty		
	All	Prime	Civilian Only	Other Nonenrolled
Married	0.70	0.86	0.82	0.78
Age	32	47	60	56
Male	0.84	0.35	0.50	0.51
Health status (mental)	52	52	54	52
Health status (physical)	52	48	46	45
Travel time to provider < 30 minutes	0.86	0.79	0.86	0.78
Hispanic	0.09	0.06	0.03	0.05
African American	0.15	0.10	0.04	0.08
HS graduate	0.69	0.70	0.64	0.70
College degree	0.31	0.24	0.32	0.24
Other insurance <sup>a</sup>	0.20	0.36	0.90	0.70
Private insurance	0.07	0.15	0.43	0.26
Medicare (part B)	0.00	0.10	0.34	0.31
CHAMPUS supplemental insurance	0.17	0.28	0.62	0.51
In catchment	0.92	0.76	0.44	0.66

<sup>a</sup> Includes plans such as Blue Cross, Kaiser (HMO, or otherwise).

### 3.3 Changes in Access

Access to health care continues to improve under TRICARE. Enrollees in TRICARE Prime are generally satisfied with their level of access to the health care system. There

was a tendency for those enrolled with a military PCM to report greater levels of satisfaction with access than those enrolled with a civilian PCM.

Three categories of access were examined to reach this conclusion:

- Realized access, based on use of preventive care,
- Availability and ease of obtaining care, and
- Efficiency of the process of receiving care.

A set of measures was developed for each of these categories.

**Realized access.** One class of measures that relates to the use of care has been termed *realized access*. These measures are used to indicate the ability of people to gain entry to the health care system. Medical visits for preventive care (well-care), as well as visits for illness and injury, fall into this category.

For preventive-care measures, estimates were made of the proportion of beneficiaries who, in a 12-month period, reported having a:

- Physical examination,
- Blood pressure reading,
- Cholesterol screening,
- Gynecological examination (women only),
- Mammogram (women only),
- Prostate exam (men only).

**Availability.** Availability addresses the issue of whether people are able to get care when they feel they need it. Measures of availability that were examined include:

- Being able to get care at one's facility of choice,
- Being able to see a particular doctor, and
- Access to one's provider by telephone.

Having a usual source of care should improve one's ability to obtain care, and it is often the first step in gaining access to the system. Under the Prime option, all enrollees are assigned a PCM and, therefore, do have a usual source of care [other than the emergency room (ER)].

Another measure of the availability of care is being able to visit the facility of choice. As mentioned earlier, with the inception of the Prime option came a priority system for appointments at the MTF. Active duty personnel and those enrolled in Prime get first priority for appointments. This could potentially squeeze out others depending on space-available appointments.

The following additional measures of health care availability were also used:

- Access to health care when needed,
- Access to specialists,
- Access to hospital care,
- Access to care in an emergency,

- Availability of advice over the telephone, and
- Availability of prescription services.

**Process.** Another class of access measures is related to the process of gaining entry into the health care system. These process measures focus on administrative aspects of access, including making an appointment and waiting time to see a provider after arriving for the appointment. The following process measures of access were examined:

- Time waiting to see a provider (time between appointment and visit, and time waiting in office),
- Ease of making an appointment by telephone,
- Travel time to facility,
- Perceived convenience of location, and
- Perceived convenience of hours.

### 3.3.1 Realized Access

Two aspects of realized access were evaluated: general use of the health-care system (medical visits) and use for preventive care.

Table 3-6 shows that access, as measured by the use of medical care, rose dramatically in all regions during the period of analysis as TRICARE evolved. Prime enrollees had the highest level of access. (Regional measures of access are shown in Appendix C.)

**Table 3-6. Changes in Proportion of Beneficiaries With a Medical Visit From 1994 to 1998**

Region	Military Status / Source of Care							
	Active Duty		Non-Active-Duty				Total	
	All		Prime		Other <sup>a</sup>		All	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
3	0.71	0.86*	0.85	0.94*	0.84	0.92*	0.82	0.91*
4	0.74	0.88*	0.85	0.92*	0.82	0.93*	0.81	0.92*
6	0.73	0.87*	0.86	0.95*	0.84	0.92*	0.81	0.92*
7/8	0.73	0.85*	0.79	0.93*	0.82	0.90*	0.79	0.90*
9	0.72	0.81*	0.81	0.93*	0.86	0.91*	0.81	0.89*
10	0.69	0.90*	0.88	0.94*	0.88	0.91	0.86	0.92*
11	0.75	0.89*	0.84	0.94*	0.83	0.92*	0.82	0.92*
12	0.74	0.87*	0.79	0.95*	0.80	0.90*	0.78	0.90*
Total	0.73	0.86*	0.84	0.94*	0.84	0.92*	0.81	0.91*

<sup>a</sup> It was not possible to identify the source of medical care for those not reporting a visit to a health care provider. MTF space-available, civilian-care only, and "unclassifiables" are combined into the Other category.

\* Indicates significant change ( $p < .05$ ).

Emergency room use is another indicator of access. Lacking access to a "regular" source of care could result in the use of the ER for this purpose. Table 3-6 shows a dramatic drop in the use of ER visits.

**Table 3-7. Changes in Proportion of Beneficiaries Using the ER (1994–1998)**

Military Status / Source of Care										
Active Duty			Non-Active-Duty						Total	
Region	All		Prime		Civilian Care		Other Nonenrolled		All	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
3	0.48	0.32*	0.47	0.34*	0.34	0.23*	0.48	0.35*	0.42	0.29*
4	0.50	0.31*	0.49	0.31*	0.31	0.17*	0.49	0.39*	0.41	0.27*
6	0.50	0.33*	0.44	0.37*	0.30	0.25	0.49	0.43	0.42	0.33*
7/8	0.53	0.32*	0.54	0.31*	0.30	0.21*	0.52	0.33*	0.45	0.28*
9	0.41	0.31*	0.40	0.28*	0.33	0.24*	0.44	0.27*	0.39	0.27*
10	0.36	0.23*	0.32	0.25*	0.35	0.27*	0.44	0.40	0.38	0.28*
11	0.47	0.30*	0.50	0.36*	0.35	0.21*	0.51	0.34*	0.45	0.29*
12	0.55	0.30*	0.46	0.32*	0.30	0.17*	0.54	0.46	0.51	0.30*
Total	0.49	0.31*	0.46	0.33*	0.33	0.22*	0.49	0.37*	0.42	0.29*

\* Indicates statistically significant change ( $p < 0.05$ ).

TRICARE has emphasized well-care and preventive medicine. Table 3-8 shows a general increase in the receipt of preventive care from 1994 to 1998 for the beneficiary population as a whole. GYN procedures, including Pap tests, are an exception to this trend. When results are compared across subpopulations, Active duty personnel show decreased levels of realized care for about half of the measures examined.

**Table 3-8. Changes in Realized Care Indicators From 1994 to 1998**

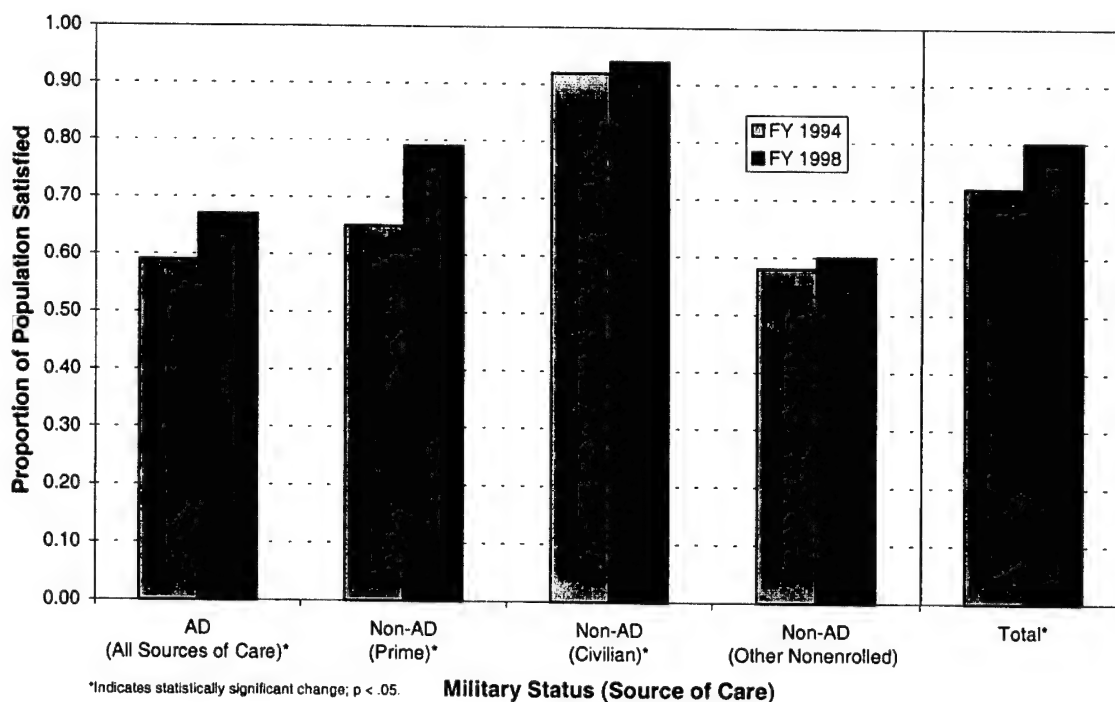
Measure	Military Status / Source of Care									
	Active Duty		Non-Active-Duty						Total	
							Other			
	All		Prime		Civilian Care		Nonenrolled		All	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
BP check	0.79	0.90*	0.78	0.91*	0.90	0.96*	0.89	0.96*	0.81	0.91*
Cholesterol check past year	0.44	0.37*	0.45	0.49*	0.68	0.67	0.60	0.60	0.52	0.52
Dental care past year	0.89	0.85*	0.45	0.60*	0.69	0.68	0.44	0.62*	0.60	0.68*
Flu shot past year	0.80	0.82*	0.34	0.35*	0.47	0.58*	0.46	0.50*	0.46	0.54*
Mammogram past year (40+)	—	—	0.65	0.65	0.72	0.71	0.68	0.69*	0.65	0.67
Mammogram past year (50+)	—	—	0.67	0.70	0.74	0.74	0.72	0.75	0.68	0.71*
PAP test past year	0.84	0.79	0.72	0.68	0.69	0.64*	0.73	0.67	0.69	0.66*
Physical exam past year	0.49	0.46*	0.49	0.54*	0.70	0.66*	0.56	0.59	0.55	0.55
Prostate check past year (age 40+)	0.42	0.39*	0.53	0.56*	0.70	0.70	0.67	0.68	0.57	0.60*
Prenatal care first trimester	—	—	0.93	0.90	—	—	—	—	0.93	0.90

Note: Procedures performed during the 12 months preceding the survey.

— Indicates insufficient data.

\* Statistically significant difference;  $p < 0.05$ .





**Figure 3-1. Getting Care When Needed—All Regions Combined  
(Excludes Regions 1, 2, and 5)**

### 3.3.2 Availability of Care

There has been a perception of increased availability of care. A greater proportion of the population reported that they were able to get care when they felt they needed it, as shown in Figure 3-1. The pattern shown in the figure, which is a composite of the nine regions being studied, is similar for most regions, as shown in Table 3-9.

**Table 3-9. Percentage Satisfied With Getting Care When Needed**

Region	Military Status / Source of Care									
	Active Duty		Non-Active-Duty						Total	
	All		Prime		Civilian		Other Nonenrolled		All	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
3	61	63	64	79*	90	94*	56	55	72	79*
4	55	64*	61	78*	92	94	54	50	72	79*
6	56	66*	53	77*	91	94	51	55	67	78*
7/8	59	64*	63	81*	90	94*	55	65	70	81*
9	58	70*	79	80	94	95	75	76	77	81
10	60	75*	73	78	91	93	64	61	79	83*
11	60	73*	72	82*	94	96	57	59	75	83*
12	67	76	73	82	99	100	65	60	73	81*
All	59	67*	65	79*	92	94*	58	60	72	80*

\* Statistically significant change from base year; p < 0.05.

The greatest increases in perceived access are among those who enrolled in Prime. Note, however, that the level of perceived access to care when needed, in general,<sup>16</sup> is considerably higher for those receiving care outside the military system (about 92 percent satisfied, with a 2-percentage-point increase over time). Thus, while TRICARE seems to result in an impression of improved access to care, it still has room for improvement.

Several additional measures of availability of care were examined. A similar pattern of increased availability of care was perceived. Table 3-10 gives the details.

**Table 3-10. Availability Measures of Access—All Evaluated Regions Combined**

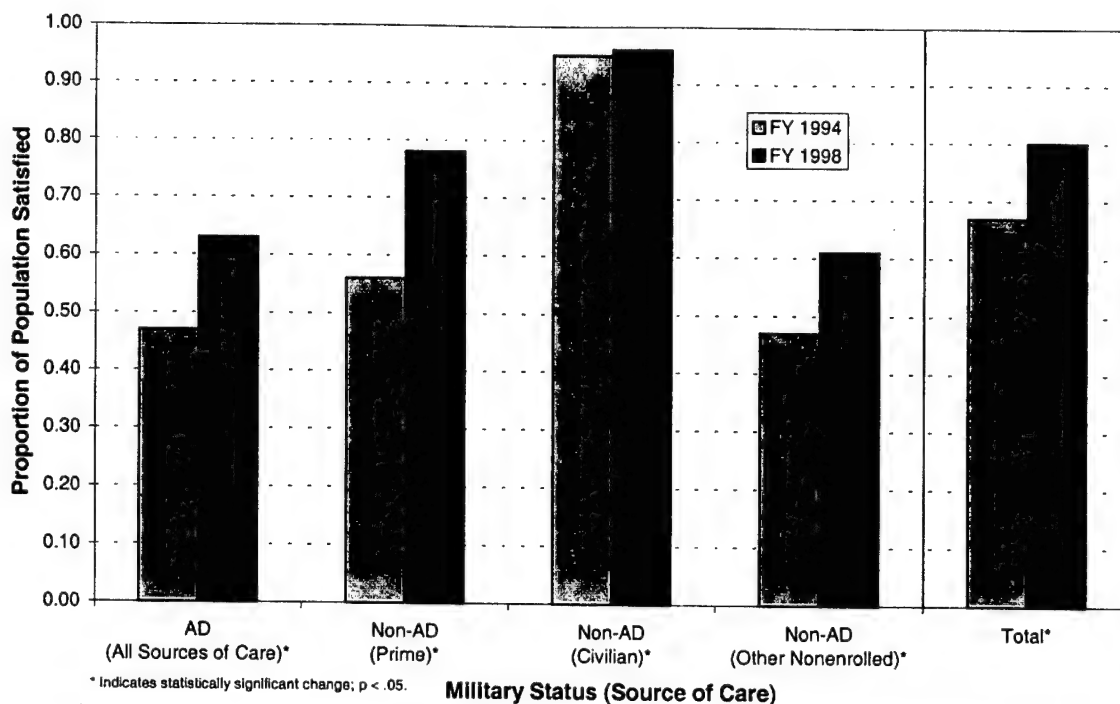
Measure	Military Status / Source of Care									
	Active Duty		Non-Active-Duty						Total	
	All		Prime		Civilian		Other Nonenrolled		All	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Satisfaction with:										
Access to care	0.59	0.67*	0.65	0.79*	0.92	0.94*	0.58	0.60	0.72	0.80*
Access to hospital care	0.69	0.76*	0.78	0.85*	0.95	0.96	0.68	0.70	0.80	0.86*
Access to emergency care	0.68	0.69	0.75	0.79*	0.92	0.95*	0.68	0.69	0.79	0.82*
Access to specialists	0.41	0.56*	0.56	0.73*	0.90	0.93*	0.46	0.55*	0.65	0.76*
Available information by phone	0.37	0.64*	0.52	0.75*	0.82	0.88*	0.42	0.57*	0.59	0.76*
Availability of prescription services	0.76	0.83*	0.83	0.87*	0.93	0.92	0.82	0.87	0.85	0.88*

\* Statistically significant change from base year;  $p < 0.05$ .

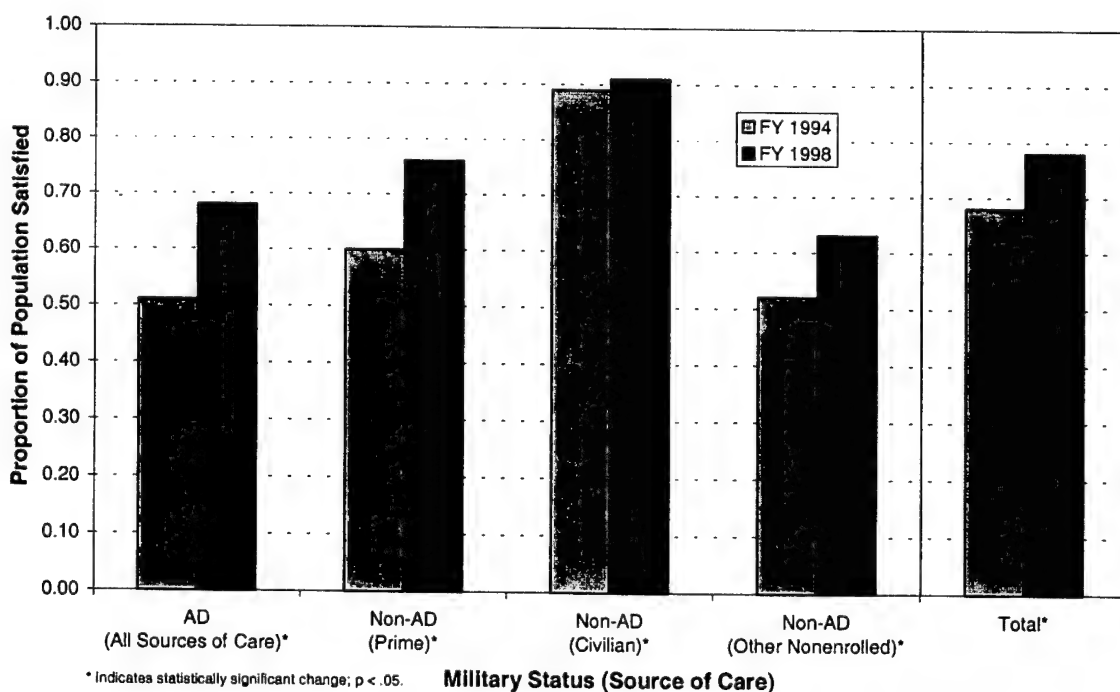
### 3.3.3 Process of Obtaining Care

Two measures that reflect the process of obtaining care are the ease of making an appointment and the waiting time between making the appointment and seeing the health-care provider. As shown in Figures 3-2 and 3-3, TRICARE has made it easier to make a medical appointment, and people can see their providers more quickly.

<sup>16</sup> Includes specialty and primary care.



**Figure 3-2. Ease of Making Appointments—All Regions Combined**



**Figure 3-3. Wait Time for an Appointment—All Regions Combined**

The gap between making an appointment and seeing a provider has dropped dramatically since 1994—particularly for Prime enrollees, whose wait times for

appointments decreased from about 13 to 6 days. Lack of specificity in the 1994 survey does not allow a breakdown of the type of care being sought. However, the 1998 survey data allow a finer level of detail.

Table 3-11 shows estimated waiting times and the percentage of a given subpopulation who were seen within TRICARE guidelines. Results are broken down by military and civilian providers. The estimates indicate that those receiving care from civilian providers generally have shorter wait times for appointments. TRICARE goals for appointment wait time are met about 90 percent of the time by both civilian and by military providers.

**Table 3-11. Wait for a Medical Appointment (1998)**

Metric and Appointment Type	Military Status / Source of Care					Total
	Active Duty	Non-Active-Duty				
	All	Military PCM	Civilian PCM	Civilian	Other Nonenrolled	
Days waited						
Minor	1.7	2.8	2.4	2.0	3.9	2.2
Routine	12.5	12.6	12.4	11.5	13.9	12.2
Urgent	0.7	0.7	0.7	0.6	0.7	0.7
Proportion seen in specified time <sup>a</sup>						
Minor	0.90	0.80	0.84	0.89	0.76	0.87
Routine	0.92	0.92	0.89	0.90	0.87	0.91
Urgent	0.89	0.88	0.86	0.93	0.86	0.90

<sup>a</sup> Specified waiting times: minor (3 days), routine (30 days), urgent (1 day).

Table 3-12 lists other process measures that were examined. The general pattern shown in the data is for improved satisfaction with access under TRICARE, but the levels of satisfaction of those using the military system are considerably less than for those using the civilian-only care. In contrast to the previous years' evaluation, there has been an improvement in being able to make an appointment by telephone. This was observed for both those with military and civilian sources of care. On average the percentage of those who were able to get an appointment with 3 or fewer phone calls increased from 63 percent in 1994 to 90 percent in 1998.

**Table 3-12. Process Measures of Access—All Evaluated Regions Combined**

Measure	Active Duty		Non-Active-Duty						Total	
	All		Prime		Civilian		Other Nonenrolled		All	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Satisfaction with:										
Convenience of hours	0.64	0.74*	0.79	0.86*	0.76	0.83*	0.94	0.96*	0.81	0.87*
Convenience of treatment location	0.81	0.86*	0.82	0.87*	0.72	0.77	0.91	0.94*	0.83	0.88*
Ease of making appointments	0.47	0.63*	0.56	0.78*	0.47	0.61*	0.95	0.96*	0.67	0.80*
Time from making to having appointment	0.51	0.68*	0.60	0.76*	0.52	0.63*	0.89	0.91	0.68	0.78*
Wait time in office	0.44	0.62*	0.60	0.74*	0.57	0.65*	0.84	0.85	0.65	0.74*
3 or fewer phone calls to get appointment	0.58	0.82*	0.57	0.87*	0.76	0.97*	0.51	0.82*	0.63	0.90*

\* Statistically significant change from base year;  $p < 0.05$ .

### **3.3.4 Effects of Provider Type on Perceptions of Prime Enrollees**

In general, more people are enrolled with military PCMs (75 percent). During 1998, the DoD did not have an explicit policy of assigning a particular physician to a Prime enrollee. In many cases, people are assigned to military clinics with no specific PCMs. However, if a person was allowed to enroll in the non-military network of civilian providers, he or she was typically able to choose a particular provider as PCM.

The previous TRICARE evaluation showed that, in 1997, free choice of a PCM had a profound effect on satisfaction with many aspects of the military health care system. The results indicated that Prime enrollees with military providers report greater levels of access than those with civilian providers, and those who get to choose their providers have higher satisfaction with the health care system. Unfortunately, the current survey data do not have information about choice of a PCM. Therefore, the effect of choice of PCM type could not be examined here.

The current survey data do allow a comparison of attitudes and other outcomes of TRICARE beneficiaries enrolled with different PCM types. Table 3-13 shows that those enrolled with a military PCM generally had more favorable attitudes and perceptions of access and quality of health care received (see Appendix D for regional statistics).

**Table 3-13. PCM Type and Prime Enrollee Perceptions of TRICARE  
(Proportion of Subgroup—1998, All Evaluated Regions Combined)**

Measure <sup>a</sup>	PCM Type	
	Civilian	Military
Satisfaction with:		
Access to health care if needed	0.74	0.80
Ease of making appointments	0.79	0.77
Outcome of health care	0.84	0.87*
Overall quality of care	0.86	0.88
Believe that:		
Prime improves access to care	0.70	0.74*
Prime improves access to preventive care	0.72	0.75*
It is easier to see specialist under Prime	0.42	0.53*
It is easier to get phone advice under Prime	0.61	0.72*
Prime saves money for care	0.76	0.78*
Would recommend Prime to a friend	0.76	0.88*

<sup>a</sup> Proportions based on those expressing an opinion other than "don't know."

\* Statistically significant difference;  $p < 0.05$ .

As shown in Table 3-14, Prime enrollees with military PCMs also received higher levels of preventive care in 1998 than those enrolled with civilian PCMs.

**Table 3-14. Preventive Care Received in 1998 from Civilian and Military PCMs**

Preventive Care Measure	PCM Type	
	Civilian	Military
Breast exam past year (age 40+)	0.70	0.76*
Cholesterol test past 5 years	0.76	0.76
Dental care past year	0.63	0.61*
Flu shot (age 65+)	0.76	0.86
Mammogram past year (age 50+)	0.72	0.74
Ever had mammogram (age 40–49)	0.93	0.95*
Mammogram past 2 years (age 50+)	0.86	0.90*
PAP smear past 3 years	0.91	0.94*
Ever had PAP test	0.99	0.99
Physical exam past year	0.57	0.53
First trimester care	0.96	0.92
Prostate check	0.59	0.63

\* Statistically significant difference;  $p < 0.05$ .

TRICARE comes close to meeting its goals for scheduling appointments for care. As shown in Table 3-15, Prime enrollees with military PCMs had to wait somewhat longer for appointments for minor care than those with civilian PCMs.

**Table 3-15. Waiting Time for an Appointment for Civilian and Military PCMs (1998; Excludes Regions 1, 2, and 5)**

Measure	PCM Type	
	Civilian	Military
Days waited for appointment		
Minor care (days)	2.39	2.83*
Routine care (days)	12.39	12.64
Urgent care (days)	0.72	0.67
Appointment goals		
Minor care (< 3 days)	0.84	0.80*
Routine care (< 30 days)	0.89	0.92*
Urgent care (1 day)	0.86	0.88*

\* Statistically significant difference;  $p < 0.05$ .

### 3.4 Changes in Quality of Care

Quality of care has many dimensions. This evaluation considers two major aspects of quality: meeting national standards and quality of care as perceived by DoD beneficiaries. In a departure from the established methodology, standards are evaluated from the perspective of a single point in time, during 1998 when the 8 regions studied had been under the TRICARE program for at least 1 year. This approach was necessary because the 1994 survey did not include items designed to measure the achievement of many national goals. The methodology compares levels of quality achieved in 1998 with levels specified in the national goals.

#### 3.4.1 Meeting Standards Under TRICARE

TRICARE Prime offers additional enhanced benefits that are not covered under TRICARE Standard. These enhanced benefits include such services as periodic examinations and preventive-care procedures. Counseling on well-care issues, such as nutrition, exercise, and substance abuse, are integrated into routine office visits. In addition, Prime offers increased continuity of care through the selection of a PCM, who either provides or coordinates all the beneficiary's health care services.

DoD has adopted as its standard the national health-promotion and disease-prevention objectives specified by the U.S. Department of Health and Human Services in *Healthy People 2000*.<sup>17</sup> Care levels under TRICARE were compared with these national standards. Prime covers specific well-care procedures at stated frequencies that tend to coincide with or exceed these national goals. Beneficiaries' survey responses were compared with the national objectives in the following areas:

- Smoking cessation,
- Dental care,
- Prenatal care (first trimester),

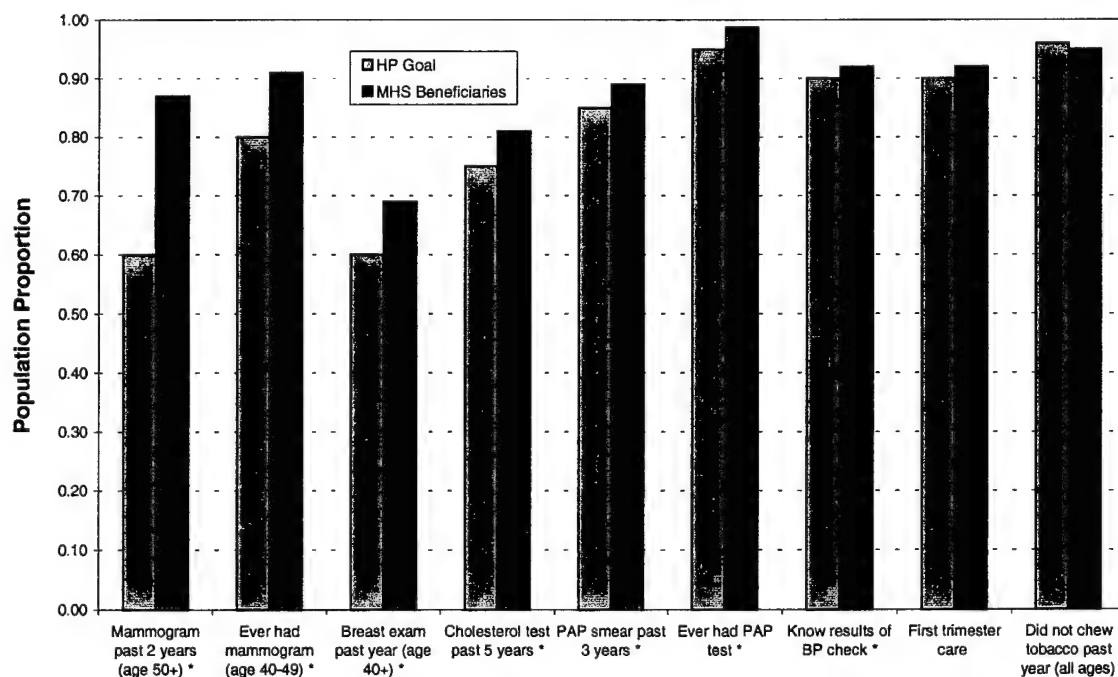
<sup>17</sup> Department of Health and Human Services, Office of Disease Prevention and Health Promotion, *Healthy People 2000: National Health Promotion and Disease Prevention Objectives*, 1991.



- Blood pressure checks,
- Cholesterol screening,
- Mammography, and
- Pap smears.

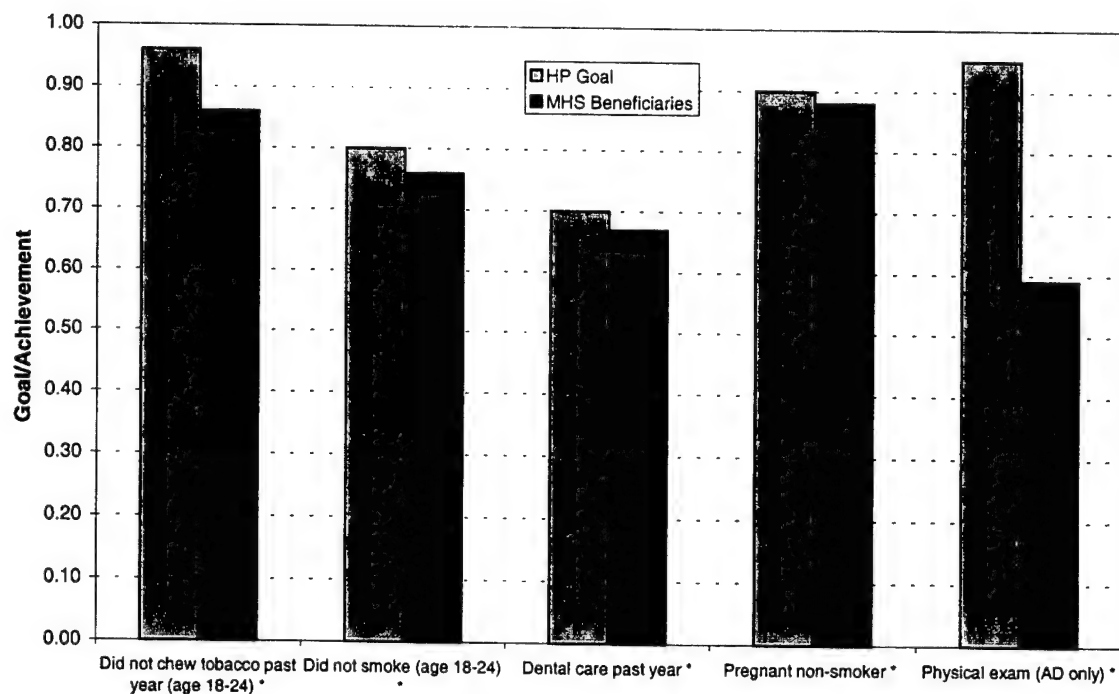
*Healthy People 2000* identifies both current national care levels and target levels for the year 2000. It identifies outcome targets for such things as smoking cessation and immunizations. In 1987, for example, 30 percent of the 20- to 24-year-olds were regular cigarette smokers. The national target is to reduce that percentage to 15 percent by 2000. In addition, *Healthy People 2000* identifies targets for frequency of well-care procedures. For example, by 2000, the national objective is for 90 percent of the adult population to have had their blood pressure checked by a trained professional within the previous 2 years. The care levels under TRICARE were compared with these national targets.

Figures 3-4 and 3-5 show the average levels achieved, for those goals met and not met, respectively, in the eight TRICARE regions combined along with the *Healthy People 2000* goals. Results are shown for the total population only. Subpopulation results are shown in Table 3-16, and regional statistics are given in Appendix E. These data indicate that TRICARE is meeting (or nearly meeting) most of the *Healthy People 2000* goals examined. Shortfalls include: dental care, use of tobacco products (both cigarettes and chewing tobacco), and physical exams for active duty personnel.



\* Indicates statistically significant difference between level achieved and goal ( $p < .05$ ).

**Figure 3-4. Achievement of *Healthy People 2000* Goals in 1998 (Entire Population, Averaged Across TRICARE Regions; Excludes Regions 1, 2, and 5)**



\* Indicates statistically significant difference between level achieved and goal ( $p < .05$ ).

**Figure 3-5. Shortfalls of Healthy People 2000 Goals in 1998 (Entire Population, Averaged Across TRICARE Regions; Excludes Regions 1, 2, and 5)**

**Table 3-16. Healthy People 2000 Goal Achievement by Military Status and Source of Care—All Evaluated Regions Combined (Proportion Meeting Goal)**

		Military Status / Source of Care				
		Active Duty	Non-Active-Duty			Total
Measure	Goal	All	Prime	Civilian	Other Nonenrolled	All
Pregnant non-smoker	0.90	0.78*	0.92	0.91*	0.85	0.88*
Know results of blood pressure check	0.90	0.90*	0.95*	0.91*	0.96*	0.92*
Breast exam past year (age 40+)	0.60	0.73*	0.72*	0.69*	0.74*	0.69*
Did not chew tobacco past year (all ages)	0.96	0.86*	0.98*	0.98*	0.99*	0.95*
Cholesterol test past 5 years	0.75	0.74	0.85*	0.76*	0.91*	0.81*
Dental care past year	0.70	0.85*	0.61*	0.60*	0.68*	0.67*
Did not chew tobacco past year (age 18–24)	0.96	0.78*	0.96	0.95*	0.98	0.86*
Flu shot (age 65+)	0.96	n/a	0.78	0.78	0.79	0.77
Mammogram past year (age 50+)	0.60	n/a	0.75*	0.69*	0.73*	0.70*

*Continued on next page*

**Table 3-16—Continued**

Measure	Goal	Military Status / Source of Care				
		Active Duty	Non-Active-Duty			Total
		All	Prime	Civilian	Other Nonenrolled	All
Ever had mammogram (age 40–49)	0.80	0.96*	0.89*	0.93*	0.95*	0.91*
Mammogram past 2 years (age 50+)	0.60	n/a	0.92*	0.86*	0.89*	0.87*
PAP smear past 3 years	0.85	0.97*	0.90*	0.92*	0.88*	0.89*
Ever had PAP test	0.95	0.99*	0.99*	0.99*	0.99*	0.99*
Physical exam past year	0.95 <sup>a</sup>	0.46	0.59	0.54	0.66	0.55
First trimester care	0.90	0.93	0.89	0.92*	0.97*	0.92*
Not smoke (age 18–24)	0.80	0.72*	0.81	0.79	0.84	0.76*

\* Indicates statistically significant difference between level achieved and HP 2000 goal ( $p < .05$ ).

n/a indicates insufficient data.

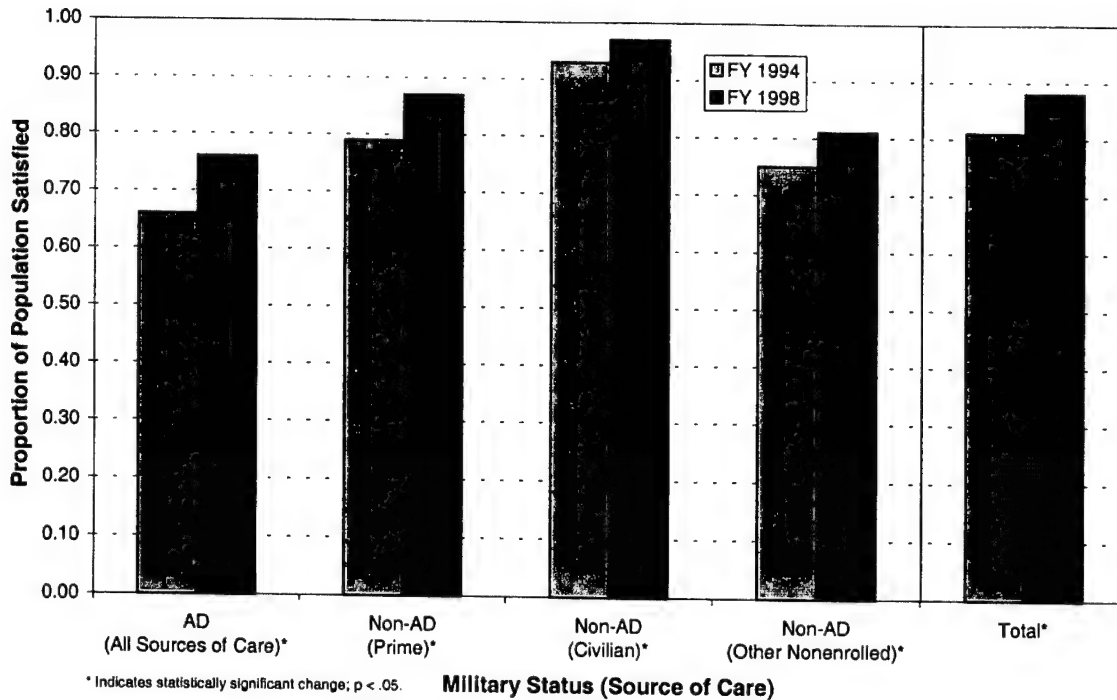
<sup>a</sup> Active duty only.

### 3.4.2 Perceptual Measures of Quality of Care

Changes in beneficiaries' perceptions of quality under TRICARE were examined based on their survey responses. The perception measures examined include beneficiaries' ratings of:

- Overall quality of health care,
- Thoroughness of examination,
- Ability to diagnose health care problems,
- Thoroughness of treatment,
- Skill of provider, and
- Perceived outcomes of the health care.

Figure 3-6 shows that the levels of perceived overall quality of care have increased significantly from 1994 to 1998. While there have been improvements in perceived quality by those receiving care in the military system, their levels still fall behind those using civilian care. Similar patterns were observed in most of the regions, as displayed in Table 3-17.



**Figure 3-6. Change in Satisfaction With Overall Quality of Care—All Regions Combined**

**Table 3-17. Regional Changes in Perceived Overall Quality of Care (Percentage of Subpopulation Satisfied)**

Region	Military Status / Source of Care									
	Active Duty		Non-Active-Duty						Total	
	All		Prime		Civilian		Other Nonenrolled		All	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
3	0.66	0.73*	0.79	0.85*	0.90	0.97*	0.74	0.85*	0.80	0.88*
4	0.67	0.77*	0.77	0.88*	0.94	0.97*	0.75	0.81	0.82	0.89*
6	0.67	0.74*	0.71	0.86*	0.96	0.97	0.70	0.76	0.79	0.86*
7/8	0.67	0.75*	0.79	0.86*	0.93	0.97*	0.75	0.81	0.81	0.87*
9	0.65	0.77*	0.86	0.89	0.95	0.96	0.84	0.89	0.83	0.88*
10	0.56	0.78*	0.83	0.89*	0.94	0.95	0.82	0.80	0.85	0.90*
11	0.67	0.80*	0.84	0.91*	0.94	0.97	0.76	0.77	0.83	0.89*
12	0.59	0.80*	0.81	0.90*	0.98	0.99	0.73	0.74	0.74	0.86*
All	0.66	0.76*	0.79	0.87*	0.93	0.97*	0.75	0.81*	0.81	0.88*

\* Indicates statistically significant change over time ( $p < .05$ ).

Table 3-18 shows the effects of TRICARE on various quality-of-care attributes. Improvements under TRICARE were observed for each aspect of quality. The familiar pattern of greater levels of satisfaction for those with civilian-only (versus military) sources of care is observed for these data. The pattern and levels of satisfaction with quality attributes exhibited by those using MTF space-available care (Other, not enrolled) and Prime enrollees are nearly identical (9-percentage-point average increase for each).

This is to be expected because these groups receive their health care mostly at the same facilities.

**Table 3-18. Measures of Perceived Quality of Care—All Evaluated Regions Combined  
(Proportion of Subpopulation Satisfied with Attribute)**

Measure	Military Status / Source of Care									
	Active Duty		Non-Active-Duty						Total	
	All		Prime		Civilian Care Only		Other Nonenrolled		All	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Satisfied with ability to diagnose	0.63	0.73	0.76	0.83	0.91	0.94	0.72	0.82	0.78	0.85
Satisfied with admin staff courtesy	0.62	0.87	0.77	0.92	0.93	0.98	0.72	0.91	0.79	0.93
Satisfied with attention by provider	0.67	0.83	0.77	0.87	0.90	0.95	0.73	0.84	0.79	0.89
Satisfied with explanation of medical tests	0.66	0.76	0.77	0.85	0.90	0.94	0.76	0.81	0.80	0.86
Satisfied with explanation of procedures	0.69	0.77	0.78	0.85	0.91	0.95	0.76	0.80	0.81	0.87
Satisfied with health care resources	0.35	0.55	0.49	0.67	0.80	0.86	0.41	0.56	0.56	0.70
Satisfied with health care technical aspects	0.52	0.64	0.68	0.78	0.86	0.91	0.63	0.73	0.71	0.79
Satisfied with outcome of health care	0.68	0.76	0.79	0.85	0.92	0.95	0.76	0.83	0.81	0.87
Satisfied with overall quality of care	0.66	0.76	0.79	0.87	0.93	0.97	0.75	0.81	0.81	0.88
Satisfied with skill of provider	0.69	0.79	0.81	0.88	0.94	0.96	0.79	0.87	0.83	0.89
Satisfied with thoroughness of exam	0.66	0.77	0.76	0.85	0.92	0.95	0.73	0.82	0.79	0.87
Satisfied with thoroughness of treatment	0.66	0.75	0.80	0.85	0.93	0.96	0.76	0.83	0.81	0.87
Satisfied with time spent with provider	0.61	0.78	0.71	0.83	0.87	0.90	0.69	0.80	0.75	0.85

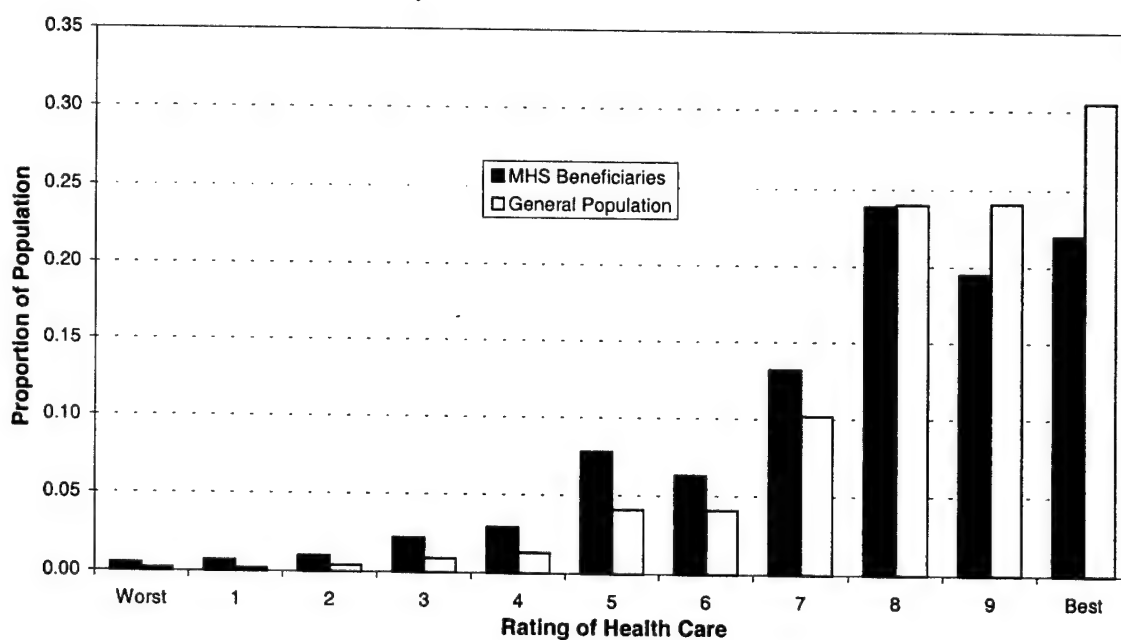
Note: All differences between 1994 and 1998 satisfaction levels were statistically significant ( $p < .05$ ).

### 3.5 Comparisons of MHS Beneficiaries with the General Population

How do MHS beneficiaries' satisfaction with access to and quality of health care compare with that of the general population? Data from the National CAHPS<sup>18</sup> Benchmarking Database (NCBD) was used to contrast the populations.

<sup>18</sup> Consumer Assessment of Health Plans Studies.

The metrics used for some of the CAHPS measures was in the form of a rating scale. Respondents were asked to rate their health care on a scale from 0 to 10, where 0 equated to “worst health care,” and 10 to “best health care.” The most straightforward estimate of peoples’ ratings is the mean rating. While it is possible to test for the statistical significance of the difference in mean ratings for the populations, it is difficult to interpret the meaning of the difference in terms of the scale metric. For example, on average DoD beneficiaries rated their health care 7.8, while the average rating in the general population was 8.4. Though this difference is statistically significant it has little practical meaning. As an aid for interpretation, the distribution of ratings in the two populations was used. That is, the proportion of people in a given population assigning a rating of 0, 1, 2, . . . , 10 was determined. These proportions were then compared across populations. Because the distribution of ratings was skewed toward the favorable end of the scale, most of the ratings were in the range of 5 to 10. The population with the greater mean rating also had a greater proportion of responses associated with ratings of 8, 9, and 10 (Figure 3-7). This gives rise to an alternate metric—the proportion of a particular subpopulation with ratings of 8 or greater. Estimates based on this metric are labeled “ratings 8+.” Although this too is an arbitrary metric, it is somewhat closer to the “proportion satisfied” metric used elsewhere in the evaluation.



**Figure 3-7. Health Care Rating Scale Distributions**

Because population demographics are likely to affect satisfaction and other ratings, estimates of satisfaction in the general population were statistically adjusted to reflect MHS beneficiary demographics.<sup>19</sup> The general pattern of results, displayed in Table 3-19,

<sup>19</sup> This was done in a similar manner to the estimates made to the 1994 baseline population to reflect 1998 population demographics.

suggests that MHS beneficiaries are less satisfied with their health care than those in comparable health plans in the general population.<sup>20</sup>

**Table 3-19. Comparison of TRICARE With the General Population**

Item (Scale)	Source of Care/Population									
	Military PCM versus HMO		Civilian PCM versus HMO		Civilian Only versus POS+PPO+ Indemnity		Other Nonenrolled versus POS		All	
					TRI- CARE	NCBD	TRI- CARE	NCBD		
	TRI- CARE	NCBD	TRI- CARE	NCBD						
<i><b>General Satisfaction:</b></i>										
Rating of health insurance plan (11 pt.)	6.08	7.68*	6.89	7.71*	7.50	8.37*	6.85	7.90*	6.80	8.02*
Rating of health insurance plan (prop. 8+ rating)	0.32	0.61*	0.45	0.64*	0.60	0.75*	0.48	0.65*	0.46	0.68*
<i><b>Access:</b></i>										
Get routine appointment as soon as wanted (yes/no)	0.68	0.81*	0.73	0.83*	0.89	0.92	0.78	0.85	0.79	0.85*
See doctor for illnesses/injury as soon as wanted (0/1)	0.71	0.85*	0.76	0.88*	0.91	0.93	0.81	0.91*	0.81	0.88*
Able to get help by phone (yes/no)	0.74	0.86*	0.75	0.87*	0.93	0.92	0.82	0.92*	0.84	0.89*
Problem in getting referral (yes/no)	0.63	0.79*	0.69	0.78*	0.88	0.88	0.75	0.83	0.76	0.80*
Used ER past 12 months (yes/no)	0.31	0.13*	0.34	0.13*	0.23	0.12*	0.37	0.12*	0.29	0.12*
<i><b>Quality of Care:</b></i>										
Rating of health care (11 pt.)	7.05	8.05*	7.65	8.21*	8.42	8.78*	7.88	8.51*	7.77	8.46*
Rating of health care (prop. 8+ rating)	0.50	0.71*	0.63	0.75*	0.80	0.86*	0.67	0.80*	0.65	0.79*
Doctor listens carefully (0/1)	0.85	0.92*	0.86	0.92*	0.95	0.97	0.87	0.95*	0.90	0.94*
Rating of personal doctor	7.89	8.24*	8.25	8.25	8.46	8.68	8.34	8.34	8.24	8.46*
Rating of personal doctor (prop. 8+ rating)	0.66	0.73*	0.74	0.74	0.78	0.82	0.74	0.76	0.73	0.78*
Doctor respected comments	0.87	0.93*	0.89	0.93*	0.95	0.97	0.91	0.95	0.91	0.95*
Doctor spent enough time	0.80	0.88*	0.83	0.87*	0.90	0.94	0.84	0.91*	0.85	0.90*
Doctor explained things clearly	0.91	0.94*	0.92	0.94	0.96	0.97	0.92	0.96	0.93	0.95*
Doctor's staff helpful	0.83	0.90*	0.86	0.90*	0.96	0.96	0.90	0.93	0.90	0.92*
Doctor's staff courteous and respectful	0.90	0.95*	0.91	0.95*	0.98	0.98	0.95	0.97	0.94	0.96*
Rating of specialist	7.59	8.22*	7.89	8.35*	8.51	8.73	8.14	8.63	8.09	8.52*
Rating of specialist (prop. 8+ rating)	0.61	0.76*	0.69	0.77*	0.80	0.84	0.74	0.83	0.72	0.81*

\* Indicates statistically significant difference between TRICARE and NCBD populations ( $p < 0.05$ ).

<sup>20</sup> The two populations were grouped into 3 subpopulations corresponding to source of care or health plan. The groupings consisted of: (1) "HMO" (all TRICARE Prime enrollees) versus civilian HMOs; (2) nonenrolled MHS beneficiaries using civilian providers versus those in the general population with preferred provider organization (PPO), point of service (POS) and indemnity plans; and (3) nonenrolled MHS beneficiaries using TRICARE extra and MTF space-available care versus those in the general population with POS plans.



### 3.6 Satisfaction With Filing Medical Claims Under TRICARE

When seeking care outside the managed care network, a medical claim must be filed for reimbursement.<sup>21</sup> Use of CHAMPUS (TRICARE Standard) by those using civilian care-only dropped from 40 percent in 1994 to 33 percent in 1998, suggesting that fewer claims are now being filed.<sup>22</sup> About one-third of TRICARE Prime enrollees in 1998 also filed claims because they were referred to out-of-network providers. Using data from the NCBF, claims filing experience under TRICARE is compared to those with civilian plans in Table 3-20. The numbers shown for those in civilian plans (NCBF) are adjusted for demographic differences in the populations, and are based on the characteristics of MHS beneficiaries in 1998.

**Table 3-20. Claims Processing Problems in 1998 (Excludes Regions 1, 2, and 5)**

Item	Source of Care/Population									
	Military PCM versus HMO					Civilian Only versus POS+PPO+ Indemnity				
	TRI-CARE		Civilian PCM versus HMO		All	Other Nonenrolled versus POS		TRI-CARE		All
	CARE	NCBF	CARE	NCBF		CARE	NCBF	CARE	NCBF	
Filed a claim	0.33	0.30	0.34	0.31	0.33	0.27	0.33	0.24	0.33	0.29*
Had a problem with claim processing	0.59	0.41*	0.53	0.42*	0.46	0.38	0.55	0.48	0.53	0.40*
Had a BIG problem with claim processing	0.23	0.13*	0.18	0.14	0.13	0.11	0.18	0.18	0.18	0.13*

\* Indicates statistically significant difference between TRICARE and NCBF populations ( $p < 0.05$ ).

The results suggest that overall there are fewer problems with claims under civilian plans. Within the MHS, those not enrolled using civilian providers had fewer problems with claims than either Prime enrollees or those using TRICARE Extra (Other, nonenrolled).

Some regional differences with claims filing experiences were observed (see Appendix F). These differences are partially the result of differences in procedures followed by the managed care contractor responsible for processing claims in a given region.<sup>23</sup>

<sup>21</sup> In principle, those enrolled in Prime and nonenrollees using the Extra network do not have to file claims. Participating providers in the Extra network and providers receiving referrals from PCMs of Prime enrollees are supposed to handle the necessary claims filing. Before TRICARE, filing a CHAMPUS claim was the responsibility of the patient.

<sup>22</sup> Information on the proportion of beneficiaries who had to file their own claims was not available from the survey data.

<sup>23</sup> CHAMPUS claims were handled differently in 1994 and 1998. In 1994, before TRICARE, claims were filed directly with a fiscal intermediary who processed claims for the beneficiary's state of residence. In 1998, each region under TRICARE has a contractor responsible for handling claims. Procedures can vary from region to region.

### 3.7 Retirees

There had been some concern, that with the advent of Prime, retirees who had depended on space-available care in the MTF, would be “squeezed out”—forcing them to either enroll in Prime or seek care from civilian sources (or Medicare for those 65 and over). Table 3-21 shows the proportions of retirees by age group and source of care in FY 1994 (pre-TRICARE) and in 1998.<sup>24</sup> Among those under 65, there was a shift out of space-available MTF care and civilian care into Prime. A similar shift is observed for those 65 and over. The 13 percent who indicated that they were in Senior Prime<sup>25</sup> were either enrolled, empanelled in special programs that give military physicians experience treating an elderly population, or may think that they are in Prime but are really using space-available military care.

**Table 3-21. Retirees and Changes in Source of Care**

Age	Source of Care					
	Prime		Civilian		Other Nonenrolled	
	FY94	FY98	FY94	FY98	FY94	FY98
Less than 65	—	0.36	0.52	0.48	0.48	0.16
Greater than 64	—	0.13	0.66	0.64	0.34	0.22

Note: Results exclude Regions 1, 2, and 5.

How satisfied are retirees with their health care? Table 3-22 shows changes in satisfaction levels of retirees from 1994 to 1998 for key indicators of access and quality. (Detailed data are shown in Appendix G.) Statistically significant increases in satisfaction were observed for nearly all measures over the period. An exception was for nonenrolled retirees who mostly use space available MTF care. Their levels of satisfaction were noticeably lower—and have remained lower—than enrolled retirees and those getting their care outside the MHS (from civilian sources).

How does retiree satisfaction compare with that of active duty beneficiaries and their families (active-duty family members are represented as ADFM in the figures below), and the civilian population in general? Two key indicators are shown as the basis of comparison: access to routine appointments and rating of health care. Figures 3-8 and 3-9 provide estimates of the level of retiree satisfaction under their current plan (military system), and what it would be if they were in civilian plans (civilian system).

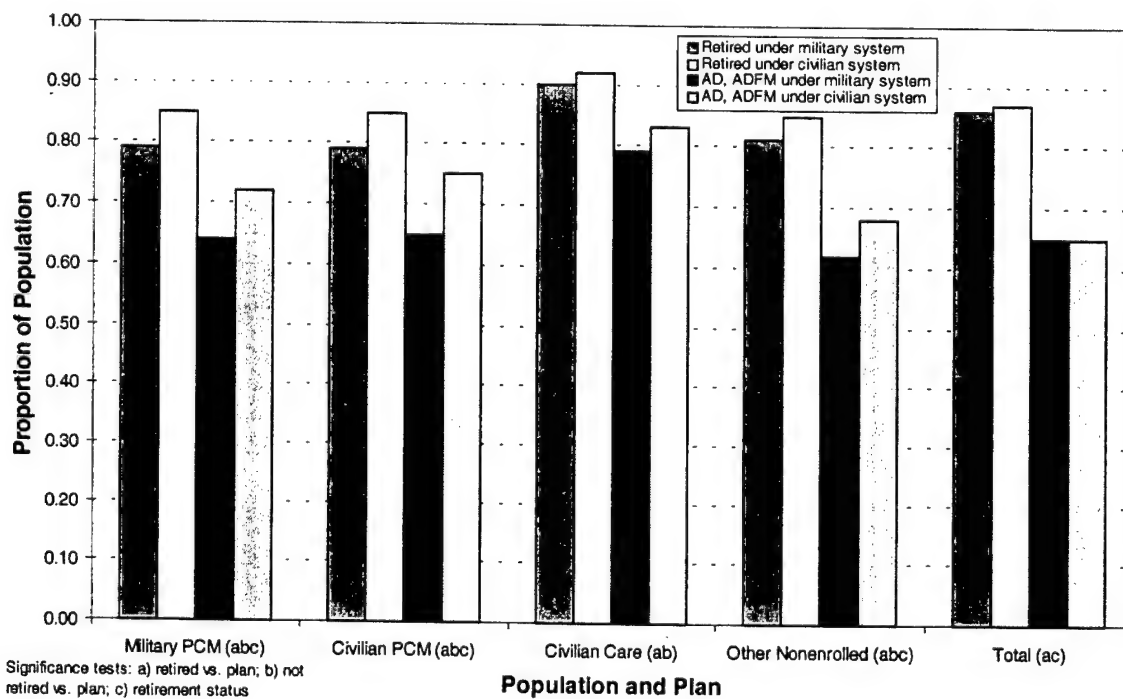
<sup>24</sup> The numbers sum to 100 percent within year and age group.

<sup>25</sup> Senior Prime enrollment began on 1 September 1998.

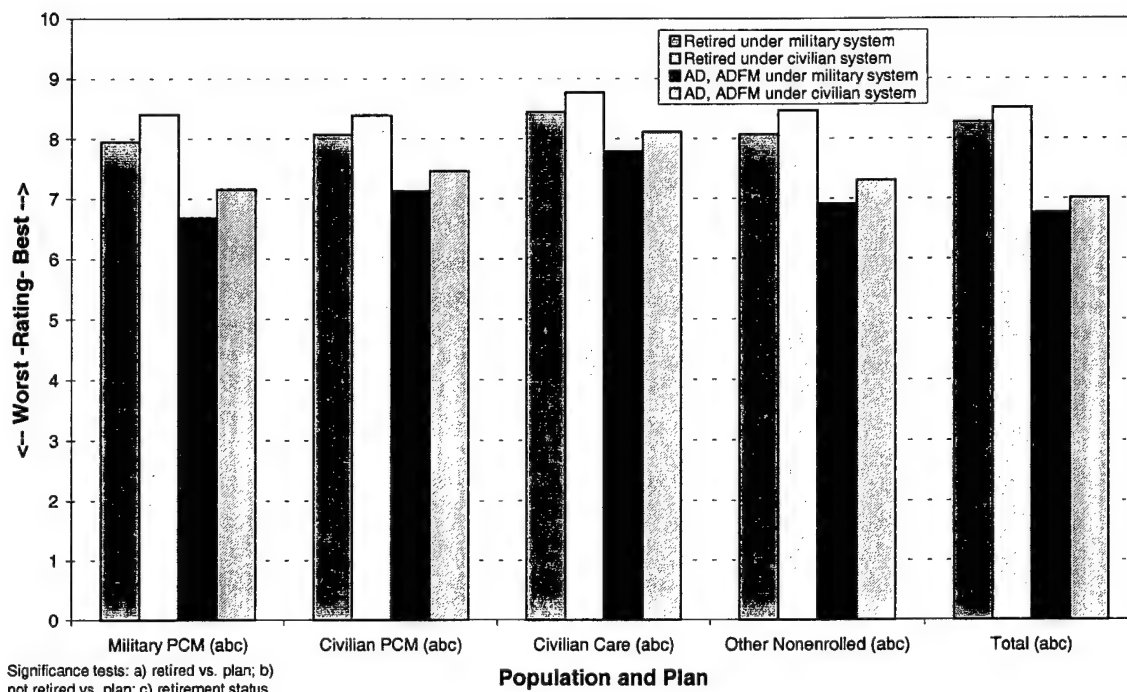
**Table 3-22. Changes in Satisfaction Measures of Access and Quality for Retirees—  
All Evaluated Regions Combined**

Satisfaction Measure	Source of Care							
	Prime		Civilian Care		Other Nonenrolled		All	
	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
<b>ACCESS</b>								
<i>Availability:</i>								
Access to care if needed	0.70	0.84*	0.91	0.94*	0.60	0.59	0.80	0.86*
Access to hospital care	0.79	0.88*	0.95	0.96*	0.69	0.69	0.86	0.91*
Access to emergency care	0.79	0.84*	0.92	0.95*	0.70	0.70	0.84	0.89*
Access to specialists	0.62	0.79*	0.90	0.93*	0.50	0.55	0.75	0.85*
Available information by phone	0.58	0.77*	0.82	0.88*	0.45	0.56*	0.69	0.81*
Availability of prescription services	0.86	0.88*	0.93	0.93	0.83	0.89*	0.89	0.91*
<i>Process:</i>								
Ease of making appointments	0.62	0.82*	0.94	0.96*	0.48	0.60*	0.77	0.87*
Time from making to having appointment	0.64	0.79*	0.90	0.91	0.53	0.63*	0.76	0.84*
Wait time in office	0.67	0.78*	0.85	0.85	0.61	0.67*	0.75	0.81*
<b>QUALITY</b>								
Overall quality of care	0.83	0.90*	0.94	0.97*	0.80	0.83	0.88	0.93*

\* Indicates statistically significant change over time ( $p < 0.05$ ).



**Figure 3-8. Satisfaction With Access to Routine Medical Appointments: Military Retirees  
versus General Population (Excludes Regions 1, 2, and 5)**



**Figure 3-9. Military Retiree versus General Civilian Population Rating of Health Care**

The general conclusion that can be drawn from these data is that retirees tend to be more satisfied with access to routine medical appointments (and other aspects of access) and rate their health care higher than do Active duty personnel and their family members. However, retired military and their family members, when compared to the general population, are less satisfied with access and do not rate their health care as highly as those in the general population.<sup>26</sup>

### 3.8 Effects of Region Maturity

The methodology adopted for this evaluation examines changes in measures of access and quality from a single baseline period (1994), before TRICARE inception, to 1998. This methodology is extended to examine trends in access and quality indicators.

Because initial enrollment dates were staggered across regions, regions will achieve a given level of maturity in different calendar years. Using a fixed baseline period of 1994 (necessitated by data limitations) will leave gaps in an annual trend line for certain regions. The exception is Region 11, for which there are four consecutive years of data, 1994 to 1998.

<sup>26</sup> Note that the comparisons between the retired military and general populations are adjusted for differences in demographics. Data labeled "under civilian system" are estimates of levels of satisfaction for the military population if they were under the civilian plan.

### 3.8.1 Region 11 Changes

Region 11 was the first TRICARE site and has been enrolling people in Prime since March 1995. The previous evaluations focused on this single region because it was the only one that had been operational long enough at the time with meaningful longitudinal data. The results of the earlier evaluations suggested that TRICARE had resulted in increased access and that quality of care was being maintained. A further look is now taken for evidence of a continued trend in access and quality of care in Region 11.

#### 3.8.1.1 Access to Care

Figures 3-10 and 3-11 show 3-year trends<sup>27</sup> for beneficiary satisfaction with access to care when needed, and ease of making an appointment, respectively, for each of the defined subpopulations (Appendix H provides supporting data). The results show that levels of satisfaction continue to rise, as TRICARE matures. Levels of satisfaction with access for those with civilian sources of care were the highest—consistently above 90 percent. Satisfaction with access to Prime rose by more than 20 percentage points over the period, but it is still below that of access to civilian care.

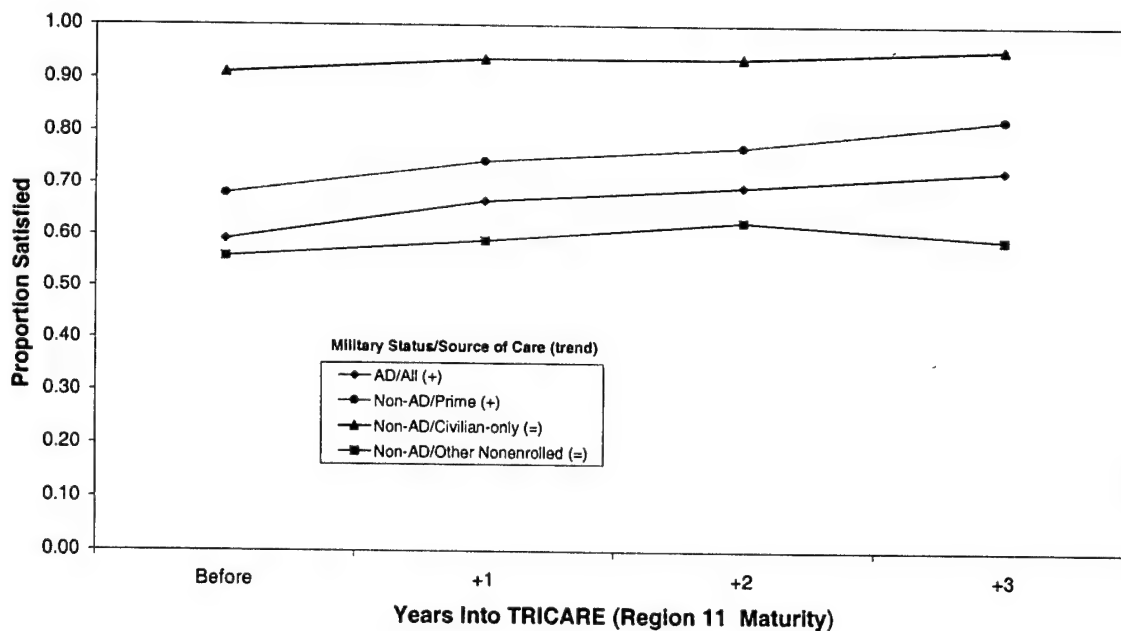


Figure 3-10. Trends in Satisfaction with Access to Care When Needed in Region 11

<sup>27</sup> Statistical significance of a linear trend ( $p < 0.05$ ) is indicated by "+" if positive/rising, and "-" if negative/falling. An equal sign is used to indicate that year-to-year changes were not statistically significant.

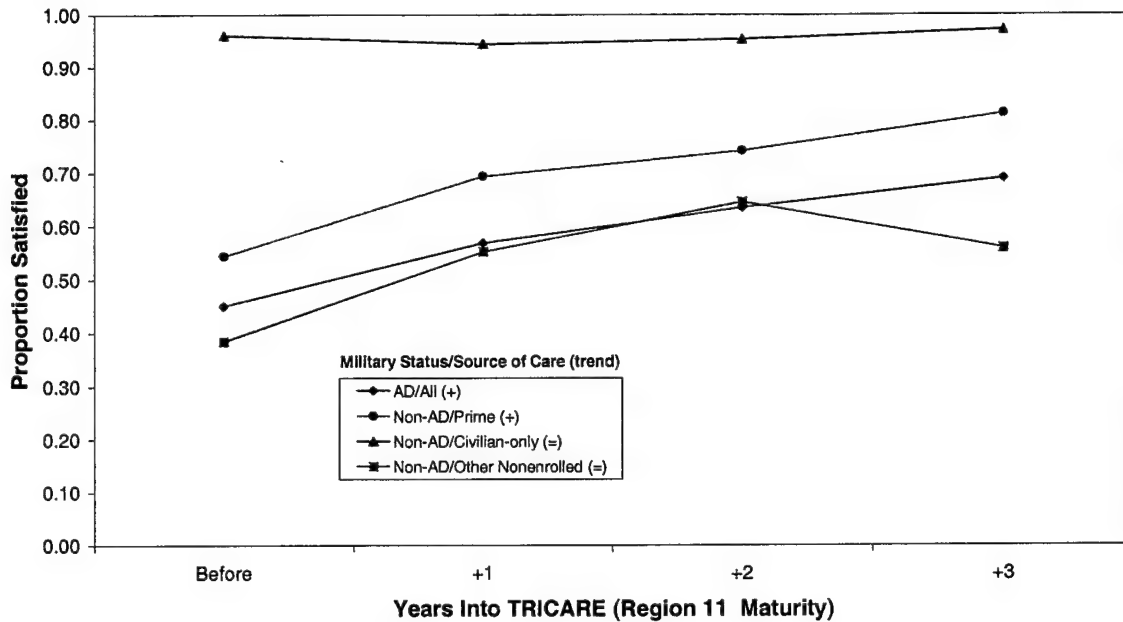


Figure 3-11. Trends in Satisfaction with Ease of Making an Appointment in Region 11

### 3.8.1.2 Quality of Care

Figure 3-12 shows the 3-year trends for satisfaction with quality of care in Region 11. The general trend (*total* group) suggests a gradually improving perception of quality of care. The levels of satisfaction with quality of care received at military facilities are approaching those received at civilian ones in Region 11.

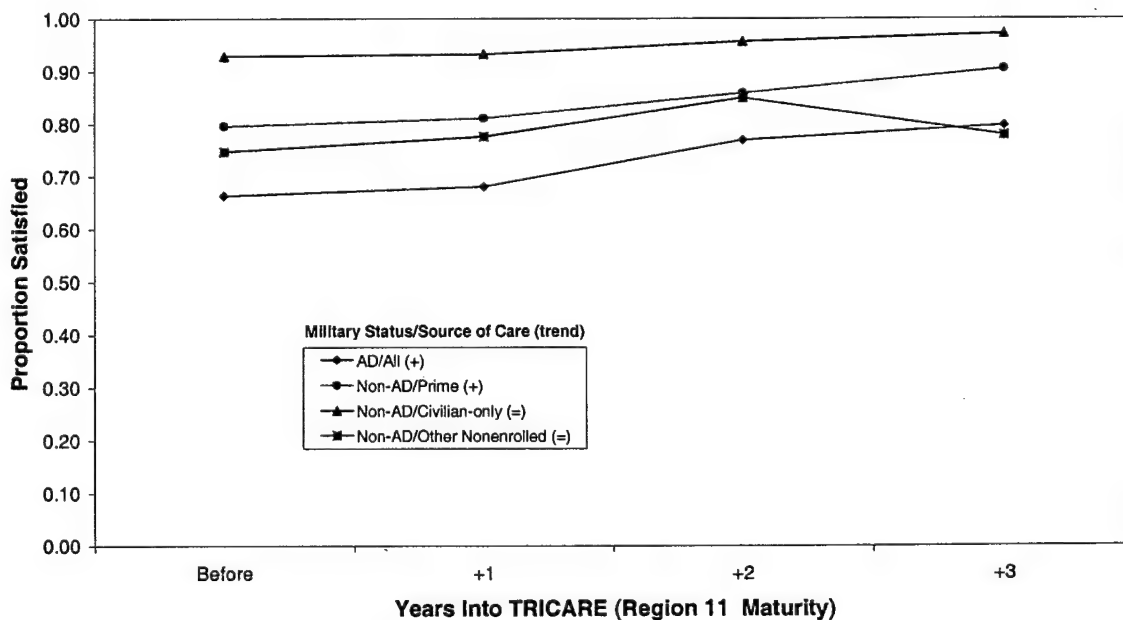


Figure 3-12. Trends In Satisfaction With Overall Quality Of Care In Region 11

### 3.8.2 Region Maturity

As TRICARE matures, will there be a leveling-off in the increase in access and quality measures that were observed from the baseline period to 1 year after implementation? The previous look at key indicators for Region 11 had shown a linear growth trend. Table 3-23 shows estimates of satisfaction of non-active-duty Prime enrollees over the 4 year period. The data are grouped by regions that began enrolling beneficiaries at about the same time.<sup>28</sup>

**Table 3-23. Trends in Satisfaction with Access to Care If Needed for Non-Active-Duty Prime Enrollees (Proportion Population Satisfied)**

Regions	Year			
	1994	1996	1997	1998
11	0.71	0.76	0.79	
6, 9, 10, 12	0.68		0.76	0.79
3, 4, 7/8	0.64			0.80
Combined (All except 1, 2, and 5)	Maturity			
	Base (1994)	+1	+2	+3
	0.66	0.78	0.79	

Each column of Table 3-23 corresponds to a year. The cell entries are the average proportion of non-active-duty enrollees satisfied with "access to care when needed" for the regions shown in the left-most column. Diagonal entries represent a particular year of TRICARE maturity. For instance, Region 11 in 1996, Regions 6, 9, 10, and 12 in 1997, and Regions 3, 4, and 8 in 1998 represent 1 year of maturity. Region 11 in 1997 and Regions 6, 9, 10, and 12 in 1998, represent 2 years of maturity. The last row of the table shows the averages of regions with 1, 2, and 3 years of maturity, respectively, as well as the baseline (0 years of maturity). The data shown in Table 3-23 suggest a positive trend between the baseline and 3 years into TRICARE.

The pattern of available data contributing to each of the levels of maturity is somewhat sparse. Note that only Region 11 has 3 years of maturity. It is only at 1 year of maturity that are all regions used. For these reasons findings about the effects of region maturity on the outcomes measured here are only suggestive.

The efficacy of using this method to measure region maturity rests on the assumption that year-to-year changes are the result of TRICARE. So-called "annual effects" and "regional effects" are assumed to net to zero. This assumption is virtually the same as made earlier that changes in access and quality from the 1994 baseline to the current evaluation year are caused only by TRICARE effects.

<sup>28</sup> Regions grouped together had been enrolling for about 12 months prior to survey administration. Because the date of survey administration did not necessarily correspond to the date of initial enrollments, a maturity of 1 year could vary somewhat for the regions represented in a given row of the table. Perhaps a more accurate label for "1 year maturity" would be "maturity period one." However, the intervals between subsequent maturity periods correspond to survey administration intervals. These intervals were approximately 1 year.



Figures 3-13 and 3-14 show estimates of access and quality-of-care indicators and region maturity by source of health care. (Additional measures are shown in Appendix I.) Again, a positive trend is seen for each source-of-care group on both indicators.

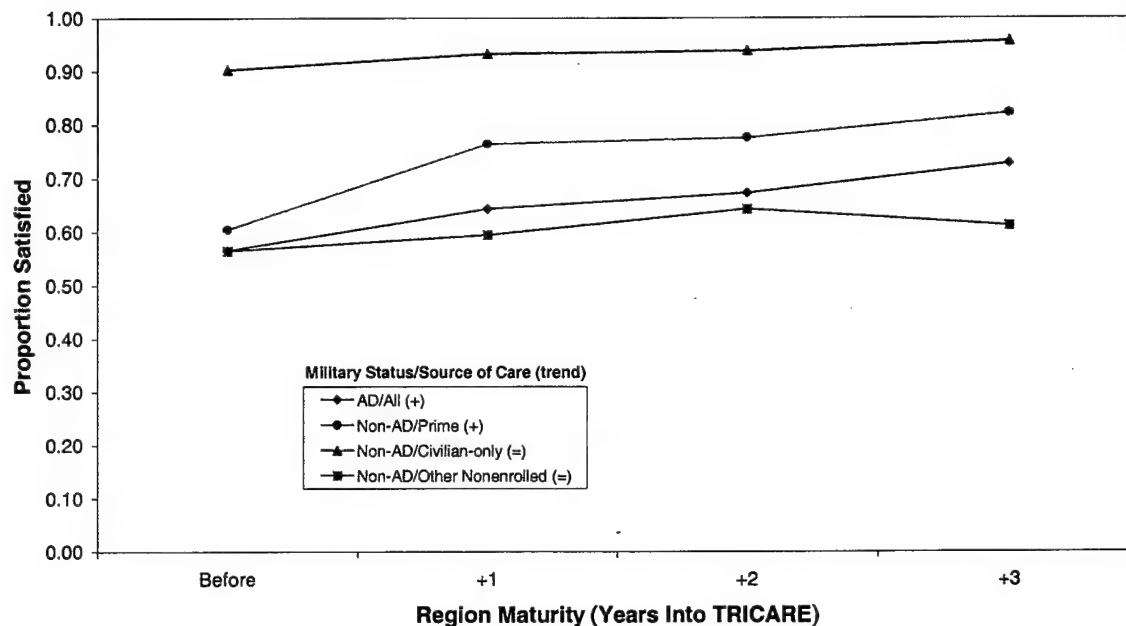


Figure 3-13. Trends in Satisfaction with Access to Care When Needed

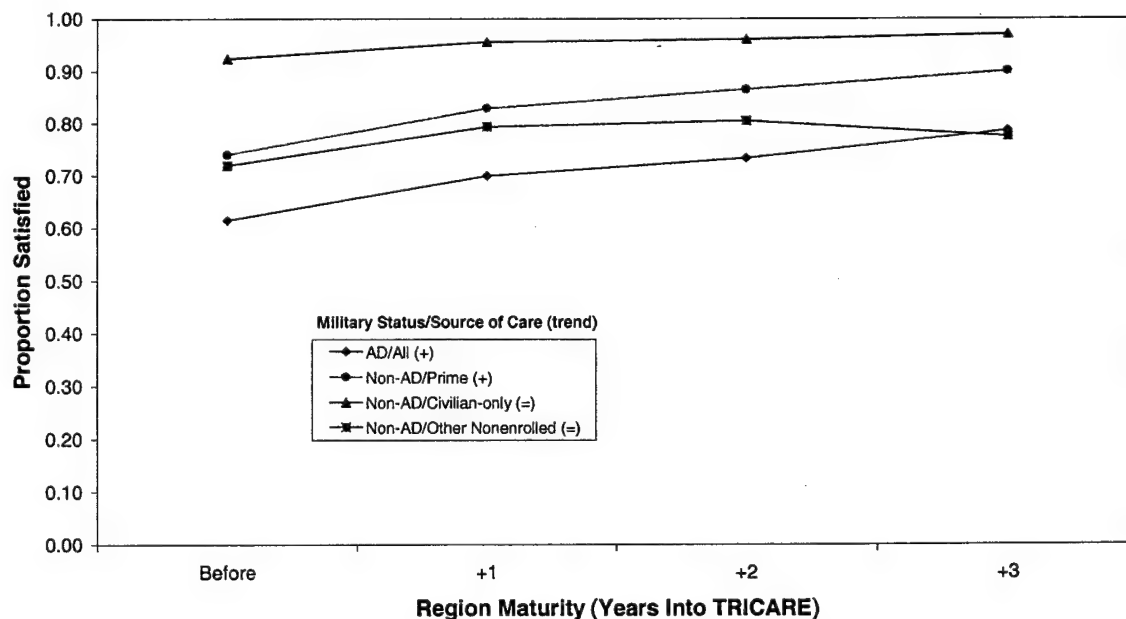


Figure 3-14. Trends in Satisfaction with Overall Quality of Care

### 3.9 Predictors of Satisfaction with Health Plan

What factors contribute to how well beneficiaries rate their health plans? The contributions of perceived access to care (including getting referrals to specialists and getting routine appointments), problems with claims processing, and quality of care as predictors of health plan rating are examined.<sup>29</sup> The 11-point rating scale was transformed to a binary metric for ease of interpreting the results. The “top-3” metric was again used. Those ratings above a 7, were given a value of 1, and those at or below 7 were given a value of 0. Therefore, the average value of this measure of health plan rating will be the proportion of beneficiaries in the “top-3.” A logistic regression model was used to relate the predictors of the health plan rating for each subpopulation.

To assess the effect of claims processing problems, and the other independent variables, a given independent variable was alternately assigned a value of 0 and 1, and estimates of the transformed health plan rating were made. The difference in the average values of these estimates represents the marginal effect of the variable or condition. For example, it is estimated that 27 percent of active duty beneficiaries would be in the top 3 rating categories for their health plan under the condition “no problems with claims processing.” Alternatively, this value falls to 13 percent when there are problems with claims processing. Thus, the marginal effect of claims processing on health plan rating is a change of 13 percentage points. The relative importance of each of the independent variables can then be determined by comparing their marginal effects.

The results shown in Table 3-24 indicate that *satisfaction with quality of care* and *having had a problem with claims processing* have the greatest impact on health plan rating. For those enrolled in Prime (including Active Duty personnel), satisfaction with quality of care was the more important of these two factors. Alternatively, problems with claims processing had the greatest effect on health plan rating for those with other sources of care. The relative importance of the other predictors varies with beneficiary health plan/source of care. (Note that for those in Prime, having an MTF PCM plays a relatively minor role in differentiating health plan rating once the other variables are accounted for.)

These results suggest that satisfaction with quality of care plays a dominant role in determining how well beneficiaries rate their health plan. The determinants of quality of care are examined next.

#### 3.9.1 Components of Perceived Quality of Care

A statistical model was constructed to determine the relationship between the satisfaction with overall quality-of-care rating and several components or attributes of quality, as well as with measures of satisfaction with access to care.<sup>30</sup> Table 3-25 shows

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<sup>29</sup> Survey respondents rated their health plan on an 11-point scale, anchored by the descriptors “worst” (score of 0), and “best” (score of 10).

<sup>30</sup> An alternative model (not shown) was developed that included “outcome of health care” as a predictor of satisfaction with overall quality of care. This measure was the dominant component of overall satisfaction. However, since health outcomes may not be directly controllable by health care policy, this measure was excluded from further consideration.

the results for the total population (all sources of care). The estimated proportion that would be satisfied at the mean values of the components was 0.88. The estimated level of satisfaction with overall quality when there is dissatisfaction with the component is shown in the column labeled "no"). The estimated level of satisfaction with overall quality when there is satisfaction with the component is shown in the column labeled "yes"). The difference between the aforementioned values is the marginal effect of the component. The order of the components shown in the table is by the absolute size of marginal effect—or importance of the component in determining satisfaction with quality.

**Table 3-24. Predictors of Satisfaction with Health Plan Rating in FY 1998  
(Proportion in "Top 3")**

Military Status (Care)	Prop. in "Top 3"	Predictor (x)	Predicted Plan Rating (Proportion in "Top 3")		Marginal Effect
			Predictor Value		
			No	Yes	
AD	0.24	Satisfied with overall quality of care	0.07	0.28*	0.21
	0.24	Problem with claim	0.27	0.13*	0.13
	0.24	Access to care when needed	0.16	0.27*	0.11
	0.24	Problem getting routine appointment	0.28	0.21*	0.07
	0.24	Problem getting referral	0.25	0.18*	0.07
Prime	0.44	Satisfied with overall quality of care	0.24	0.46*	0.22
	0.44	Access to care when needed	0.27	0.47*	0.21
	0.44	Problem with claim	0.47	0.28*	0.19
	0.44	Problem getting referral	0.47	0.30*	0.18
	0.44	Problem getting routine appointment	0.46	0.41*	0.05
	0.44	MTF PCM	0.41	0.45	0.04
Civilian Only	0.60	Problem with claim	0.65	0.31*	0.34
	0.60	Access to care when needed	0.30	0.61*	0.32
	0.60	Problem getting referral	0.61	0.41*	0.20
	0.60	Satisfied with overall quality of care	0.42	0.60*	0.18
	0.60	Problem getting routine appointment	0.62	0.54*	0.08
Other Nonenrolled	0.43	Problem with claim	0.46	0.30*	0.16
	0.43	Overall quality of care	0.32	0.46*	0.14
	0.43	Problem getting routine appointment	0.45	0.35*	0.10
	0.43	Access to care when needed	0.46	0.40	0.06
	0.43	Problem getting referral	0.41	0.44	0.04
Total	0.46	Problem with claim	0.50	0.26*	0.23
	0.46	Overall quality of care	0.28	0.47*	0.19
	0.46	Access to care when needed	0.48	0.33*	0.15
	0.46	Problem getting referral	0.33	0.48*	0.15
	0.46	Problem getting routine appointment	0.48	0.41*	0.08

\* Indicates a statistically significant effect on plan rating ( $p < 0.05$ ).

**Table 3-25. Estimates of Marginal Contributions of Attributes of Quality and Access to Care with Overall Quality of Care (All Sources of Care)**

Component (x)	Component Value		Marginal Effect
	No	Yes	
Satisfied with thoroughness of treatment	0.82	0.90	0.08*
Satisfied with explanation of procedures	0.84	0.89	0.06*
Satisfied with skill of provider	0.85	0.89	0.04*
Satisfied with access to specialist	0.86	0.89	0.03*
Satisfied with waiting time for appointment	0.86	0.89	0.02*
Satisfied with thoroughness of exam	0.86	0.88	0.02*
Satisfied with access to hospital care	0.86	0.88	0.02*
Satisfied with ability to diagnose	0.86	0.88	0.02*
Satisfied with availability of health care information by phone	0.87	0.88	0.01*
Satisfied with availability of prescription services	0.87	0.88	0.01*
Satisfied with access to care if needed	0.87	0.88	0.01*
Satisfied with access to emergency care	0.87	0.88	0.01
Satisfied with ease of making an appointment	0.87	0.88	0.01*
Satisfied with waiting time to see provider	0.87	0.88	0.01
Satisfied with explanation of medical tests	0.87	0.88	0.01
Satisfied with convenience of treatment location	0.87	0.88	0.00
Satisfied with convenience of hours	0.88	0.88	0.00

\* Indicates statistically significant effect of component on satisfaction with overall quality of care ( $p < 0.05$ ).

These results show that satisfaction with health care provider technical and interpersonal skills dominates satisfaction with overall quality of care. Components related to access to care (access to specialists and waiting time for a medical appointment) have secondary impact on perceived quality. It should be noted that levels of satisfaction with most of the components shown are already quite high—leaving little room for improvement. The exception is access to specialists.

Table 3-26 summarizes results by military status and source of care groups.<sup>31</sup> Satisfaction with provider skills dominates the results for all but those using only civilian care, where “thoroughness of treatment” is most important. Access plays a secondary role for Active duty personnel and those using MTF space-available care (other not enrolled).

### 3.10 Areas of Possible Concern

While the general pattern of results shows that TRICARE has made dramatic improvements in access to care, and that most quality-of-care goals are being met, this study has identified several problem areas. These are summarized below.

<sup>31</sup> Results are only shown for components having a marginal effect of at least 3 percentage points.

**Table 3-26. Estimates of Marginal Contributions of Attributes of Quality and Access to Care with Overall Quality of Care by Military Status and Source of Care**

Military Status (Care) Group	Group Mean	Component (x)	Component Value		Marginal Effect <sup>a</sup>
			No	Yes	
AD	0.72	Satisfied with skill of provider	0.63	0.76	0.13
		Satisfied with explanation of procedures	0.67	0.75	0.08
		Satisfied with access to specialist	0.70	0.76	0.06
		Satisfied with thoroughness of treatment	0.69	0.74	0.05
		Satisfied with ability to diagnose	0.69	0.74	0.05
		Satisfied with explanation of medical tests	0.70	0.74	0.04
		Satisfied with waiting time for appointment	0.71	0.74	0.04
		Satisfied with access to care if needed	0.71	0.74	0.03
Prime	0.86	Satisfied with skill of provider	0.82	0.89	0.07
		Satisfied with explanation of procedures	0.82	0.89	0.06
		Satisfied with thoroughness of treatment	0.83	0.89	0.05
		Satisfied with access to specialist	0.85	0.89	0.04
		Satisfied with ability to diagnose	0.85	0.88	0.03
Civilian Only	0.97	Satisfied with thoroughness of treatment	0.82	0.99	0.17
		Satisfied with explanation of procedures	0.93	0.98	0.05
Other Nonenrolled	0.79	Satisfied with skill of provider	0.70	0.81	0.11
		Satisfied with thoroughness of treatment	0.71	0.82	0.11
		Satisfied with explanation of procedures	0.72	0.82	0.10
		Satisfied with appointment gap	0.77	0.83	0.06
		Satisfied with access to hospital care	0.77	0.82	0.05

<sup>a</sup> All components shown had a statistically significant effect on satisfaction with overall quality of care ( $p < 0.05$ ).

### 3.10.1 Satisfaction With Military versus Civilian Care

Levels of satisfaction with most aspects of access were shown to be markedly greater for MHS beneficiaries with a source of care outside the military system and for those in the general population. Why are those who use the MHS as a source of care less satisfied? Four characteristics of the group *not* using the military health care distinguish them from those who do.<sup>32</sup>

Those in the civilian-care group are demographically different. They are:

- Older,
- Less likely to be from a minority group (non-Caucasian, non-Hispanic),
- More likely to live out of catchment, and
- More likely to have private insurance.

<sup>32</sup> These demographics are accounted for (controlled) in comparisons of outcomes over time. However, at any one point in time, demographic differences between military status and source of care groups are as stated.

As in previous years, older people were found to have greater levels of satisfaction with their health care—regardless of the source of care. However, age alone does not account for the observed differences in satisfaction. Those living out of catchment do not have access to military care and have little choice but to use civilian sources. Having private insurance is a consequence of using civilian sources of care, not the reason for it.

Those, who in principle, could use military sources of care but do not, are also different in a more subtle way—they *chose* their civilian care health plan and chose *not* to use the military system. This “taste” for civilian care likely accounts for some of the differences in satisfaction. While it is possible to “adjust” the data and statistically predict the outcomes of a subpopulation on the basis of different demographics, it is not possible to account for the factors underlying the choice of the source of health care with the available data.

However, it was possible to identify attributes of a health care system that discriminate between those with military and civilian sources of care. Those with military sources of care:

- Had greater difficulty in making an appointment for routine care,
- Made more calls needed to make an appointment,
- Waited a longer time to get a medical appointment
- Had a less convenient treatment location,
- Took a longer time to get to their treatment location,
- Had poorer perceived access to emergency care,
- Had poorer perceived access to specialists,
- Had *better* perceived access to prescription services,
- Had greater problems with claims processing.

The 1997 evaluation of TRICARE found that those enrolled in Prime who were able to choose their own PCM had significantly greater levels of satisfaction with most aspects of their health care—even such things as how long it takes to get an appointment.<sup>33</sup> Initiatives were taken in FY1999 to let Prime enrollees choose their PCMs. That should result in increased satisfaction in the future.

### **3.10.2 Shortfalls in Meeting Quality-of-Care Goals**

While most *Healthy People 2000* goals were being met, a few were not. Some of these shortfalls are described below.

#### **3.10.2.1 Tobacco Use**

The use of tobacco products (cigarettes and smokeless tobacco) is prevalent among the enlisted population and for pregnant women. Similar shortfalls had been observed in the previous evaluation. While not a mitigating circumstance, prevalence of the use of tobacco products by youth in the general population is also high.

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<sup>33</sup> The 1998 survey did not ask about ability to choose one's provider.

While it may be difficult to achieve a reduction in the use of tobacco, providing counseling services is less problematical.

### **3.10.2.2 Pap Tests**

As reported earlier in Table 3-7, the level of *annual* Pap tests dropped from 69 to 66 percent, over the period of analysis, for women in the overall DoD beneficiary population. This is somewhat mitigated by the FY 1998 achievement of the *Healthy People 2000* goal of "Pap test in past 3 years." A similar phenomenon was observed in the FY 1997 evaluation.

Specific screening mechanisms tend to increase the chance of early detection and improve treatment outcomes. Therefore, it is in both the DoD's and the beneficiaries' best interests to use these screening mechanisms because they save lives and dollars.

### **3.10.3 Claims Processing**

Having a problem with a claim is the primary cause of dissatisfaction with one's health plan. The rate of claim filing for MHS beneficiaries was both higher than that observed under civilian plans and in those serving the general population. At the same time, MHS beneficiaries tend to experience more problems per claim filed than the general population. This was especially true for those enrolled in Prime who expect less paperwork and associated problems.

## **3.11 What Went Right**

Despite these few glitches, the net effect of TRICARE is continued improvement in access to care, as evidenced by increased satisfaction with:

- access to care,
- ease of making appointments,
- wait-times for getting an appointment,
- wait-times for seeing a doctor during an appointment,
- convenience of hours, and
- being able to see a provider of choice.

The greatest increases in satisfaction with these aspects of access to care generally occurred for those enrolled in the Prime option of TRICARE.

TRICARE has also resulted in increased satisfaction with overall quality of care for the population as a whole. Quality of care has mostly been maintained under TRICARE. Most of the quantifiable *Healthy People 2000* goals examined were met, or nearly met, for the population as a whole.

# **APPENDICES**



## APPENDIX A: DISTRIBUTION OF SUBPOPULATIONS IN THE 1994 AND 1998 SAMPLES

Table A-1 shows estimates of the distribution of the 1994 and 1998 subpopulations by source of care for the seven regions examined in the study. The proportions,  $p_i$ , were weighted to reflect the population distribution using the relationship:

$$p_i = n_i \times w_i / \text{Mean}(w_i),$$

where  $n_i$  is the number of individuals in the sample survey for a given year in a given region in a particular subpopulation,  $w_i$  is the sampling weight ( $N_i/n_i$ ), and  $N_i$  is the number of people in the eligible population for a given year and region in a particular subpopulation.

**Table A-1. Distribution of Subpopulations in the 1994 and 1998 Samples  
(Proportion With Particular Source of Care Within Region)**

Region	Military Status (Source of Care)	FY94	FY98
3	Active Duty (All)	22	20
	Non-Active Duty (Prime)	14	27
	Non-Active Duty (Civilian Care Only)	35	39
	Non-Active Duty (Other Nonenrolled)	29	14
	Total	100	100
4	Active Duty (All)	22	19
	Non-Active Duty (Prime)	15	26
	Non-Active Duty (Civilian Care Only)	37	41
	Non-Active Duty (Other Nonenrolled)	26	15
	Total	100	100
6	Active Duty (All)	23	22
	Non-Active Duty (Prime)	16	29
	Non-Active Duty (Civilian Care Only)	32	34
	Non-Active Duty (Other Nonenrolled)	29	15
	Total	100	100
7/8	Active Duty (All)	25	21
	Non-Active Duty (Prime)	15	29
	Non-Active Duty (Civilian Care Only)	29	36
	Non-Active Duty (Other Nonenrolled)	31	14
	Total	100	100
9	Active Duty (All)	32	31
	Non-Active Duty (Prime)	17	26
	Non-Active Duty (Civilian Care Only)	28	28
	Non-Active Duty (Other Nonenrolled)	23	16
	Total	100	100

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**Table A-1—Continued**

Region	Military Status (Source of Care)	FY94	FY98
10	Active Duty (All)	21	13
	Non-Active Duty (Prime)	21	29
	Non-Active Duty (Civilian Care Only)	35	44
	Non-Active Duty (Other Nonenrolled)	24	14
	Total	100	100
11	Active Duty (All)	21	21
	Non-Active Duty (Prime)	20	32
	Non-Active Duty (Civilian Care Only)	36	35
	Non-Active Duty (Other Nonenrolled)	23	12
	Total	100	100
12	Active Duty (All)	45	46
	Non-Active Duty (Prime)	17	31
	Non-Active Duty (Civilian Care Only)	11	15
	Non-Active Duty (Other Nonenrolled)	27	8
	Total	100	100

## APPENDIX B: REGIONAL DEMOGRAPHICS (MEANS OF CONTROL VARIABLES IN THE 1998 POPULATION)

Table B-1 shows mean values for the demographic variables used as "controls" in the regression analyses to estimate changes in outcomes. The data are broken down by TRICARE region and military status/source of care.

**Table B-1. Mean Values for Demographic Variables (Region by Subpopulation)**

Variable	Region 3 / Military Status (Source of Care)			
	Active Duty (All)	Non-Active Duty (Prime)	Non-Active Duty (Civilian Care Only)	Non-Active Duty (Other Nonenrolled)
Married	0.73	0.86	0.83	0.78
Male	0.85	0.35	0.49	0.61
Age (years)	33.02	48.20	60.36	56.06
SF12 mental health scale	51.80	51.89	53.33	52.16
SF12 physical health scale	51.54	47.87	45.10	45.10
Less than 45 minutes to provider	0.83	0.74	0.89	0.76
Hispanic	0.07	0.05	0.02	0.06
African American	0.21	0.16	0.07	0.11
High school education	0.72	0.72	0.65	0.72
Four or more years college education	0.27	0.22	0.30	0.22
Other insurance	0.20	0.39	0.88	0.67
Private insurance	0.07	0.17	0.39	0.22
In catchment	0.92	0.73	0.39	0.64

Variable	Region 4 / Military Status (Source of Care)			
	Active Duty (All)	Non-Active Duty (Prime)	Non-Active Duty (Civilian Care Only)	Non-Active Duty (Other Nonenrolled)
Married	0.67	0.85	0.82	0.75
Male	0.81	0.35	0.47	0.50
Age (years)	33.49	47.68	59.38	55.88
SF12 mental health scale	52.08	52.10	53.52	53.97
SF12 physical health scale	52.39	47.68	44.79	45.20
Less than 45 minutes to provider	0.81	0.78	0.85	0.79
Hispanic	0.06	0.02	0.01	0.01
African American	0.14	0.11	0.04	0.07
High school education	0.63	0.70	0.66	0.65
Four or more years college education	0.37	0.24	0.29	0.31
Other insurance	0.18	0.41	0.91	0.73
Private insurance	0.06	0.16	0.42	0.26
In catchment	0.86	0.70	0.43	0.61

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**Table B-1—Continued**

Variable	Region 6 / Military Status (Source of Care)			
	Active Duty (All)	Non-Active Duty (Prime)	Non-Active Duty (Civilian Care Only)	Non-Active Duty (Other Nonenrolled)
Married	0.69	0.86	0.83	0.77
Male	0.79	0.34	0.52	0.49
Age (years)	32.24	47.72	59.08	56.34
SF12 mental health scale	51.52	51.51	53.68	51.90
SF12 physical health scale	51.65	47.47	45.78	44.33
Less than 45 minutes to provider	0.89	0.80	0.84	0.78
Hispanic	0.10	0.09	0.04	0.11
African American	0.20	0.11	0.04	0.11
High school education	0.66	0.70	0.64	0.74
Four or more years college education	0.34	0.24	0.30	0.22
Other insurance	0.18	0.33	0.90	0.72
Private insurance	0.05	0.12	0.48	0.31
In catchment	0.93	0.76	0.33	0.59

Variable	Region 7/8 / Military Status (Source of Care)			
	Active Duty (All)	Non-Active Duty (Prime)	Non-Active Duty (Civilian Care Only)	Non-Active Duty (Other Nonenrolled)
Married	0.73	0.87	0.82	0.79
Male	0.82	0.36	0.51	0.49
Age (years)	32.64	47.08	59.53	57.18
SF12 mental health scale	52.32	52.11	53.52	52.72
SF12 physical health scale	51.83	47.39	45.64	44.70
Less than 45 minutes to provider	0.87	0.80	0.84	0.81
Hispanic	0.07	0.06	0.04	0.05
African American	0.12	0.07	0.03	0.05
High school education	0.66	0.71	0.62	0.70
Four or more years college education	0.34	0.24	0.34	0.23
Other insurance	0.19	0.38	0.88	0.76
Private insurance	0.06	0.15	0.43	0.27
In catchment	0.90	0.80	0.48	0.62

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**Table B-1—Continued**

Variable	Region 9 / Military Status (Source of Care)			
	Active Duty (All)	Non-Active Duty (Prime)	Non-Active Duty (Civilian Care Only)	Non-Active Duty (Other Nonenrolled)
Married	0.64	0.86	0.75	0.80
Male	0.90	0.31	0.53	0.42
Age (years)	30.63	45.18	63.29	52.28
SF12 mental health scale	51.41	51.96	54.57	52.26
SF12 physical health scale	52.89	49.45	45.67	47.03
Less than 45 minutes to provider	0.86	0.84	0.91	0.80
Hispanic	0.14	0.11	0.04	0.03
African American	0.12	0.08	0.06	0.06
High school education	0.75	0.70	0.62	0.71
Four or more years college education	0.25	0.24	0.34	0.23
Other insurance	0.24	0.31	0.92	0.58
Private insurance	0.08	0.13	0.42	0.24
In catchment	0.94	0.77	0.56	0.84

Variable	Region 10 / Military Status (Source of Care)			
	Active Duty (All)	Non-Active Duty (Prime)	Non-Active Duty (Civilian Care Only)	Non-Active Duty (Other Nonenrolled)
Married	0.69	0.78	0.83	0.73
Male	0.86	0.41	0.48	0.56
Age (years)	31.39	50.55	63.61	58.87
SF12 mental health scale	51.29	51.56	54.85	52.48
SF12 physical health scale	52.71	47.27	45.89	45.34
Less than 45 minutes to provider	0.88	0.79	0.88	0.67
Hispanic	0.11	0.05	0.04	0.04
African American	0.07	0.09	0.04	0.10
High school education	0.71	0.70	0.60	0.69
Four or more years college education	0.29	0.24	0.35	0.27
Other insurance	0.21	0.35	0.94	0.74
Private insurance	0.13	0.14	0.43	0.25
In catchment	0.91	0.67	0.51	0.57

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**Table B-1—Continued**

Variable	Region 11 / Military Status (Source of Care)			
	Active Duty (All)	Non-Active Duty (Prime)	Non-Active Duty (Civilian Care Only)	Non-Active Duty (Other Nonenrolled)
Married	0.71	0.86	0.83	0.79
Male	0.87	0.38	0.53	0.46
Age (years)	31.50	48.77	60.67	53.40
SF12 mental health scale	50.69	52.09	53.50	51.75
SF12 physical health scale	51.75	46.88	46.64	46.10
Less than 45 minutes to provider	0.87	0.78	0.84	0.74
Hispanic	0.05	0.04	0.02	0.02
African American	0.08	0.05	0.01	0.02
High school education	0.73	0.68	0.66	0.66
Four or more years college education	0.27	0.28	0.30	0.29
Other insurance	0.19	0.39	0.91	0.69
Private insurance	0.06	0.16	0.51	0.28
In catchment	0.88	0.77	0.42	0.77

Variable	Region 12 / Military Status (Source of Care)			
	Active Duty (All)	Non-Active Duty (Prime)	Non-Active Duty (Civilian Care Only)	Non-Active Duty (Other Nonenrolled)
Married	0.70	0.90	0.82	0.86
Male	0.84	0.20	0.43	0.38
Age (years)	31.75	41.26	56.84	48.22
SF12 mental health scale	51.62	51.87	54.45	52.08
SF12 physical health scale	51.79	50.05	50.79	46.68
Less than 45 minutes to provider	0.87	0.87	0.91	0.77
Hispanic	0.07	0.07	0.01	0.04
African American	0.13	0.04	0.03	0.07
High school education	0.64	0.63	0.60	0.64
Four or more years college education	0.36	0.32	0.34	0.33
Other insurance	0.19	0.26	0.92	0.62
Private insurance	0.05	0.10	0.58	0.29
In catchment	1.00	0.96	0.85	0.97

## APPENDIX C: REGIONAL CHANGES FROM 1994 TO 1998 IN ACCESS AND SATISFACTION WITH CARE INDICATORS

Table C-1 shows regional changes from 1994 to 1998 in outcome measures for each subpopulation. Estimates are based on 1998 population characteristics. An entry of "n/a" (not available) indicates that there were too few observations to make a reliable estimate. Entries marked with an asterisk (\*) indicate a statistically significant change ( $p < 0.05$ ).

**Table C-1. Regional Changes in Outcome Measures**

Measure	Region	Military Status (Source of Care)									
		AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Appointment gap (days)	3	10.40	6.86*	13.86	8.33*	8.40	7.87	14.56	9.59*	11.24	7.90*
	4	7.82	6.77	11.79	7.63*	6.78	7.57	13.83	8.55*	9.67	7.49*
	6	11.61	7.55*	17.23	8.35*	5.82	7.14*	18.89	8.74*	12.50	7.70*
	7/8	10.56	7.17*	13.19	8.51*	7.18	7.81	15.01	7.82*	11.22	7.86*
	9	10.30	5.98*	10.72	7.38*	7.55	7.56	10.60	6.18*	9.74	6.88*
	10	7.57	6.21	9.53	8.53	9.38	7.86*	13.95	7.39*	10.43	7.77*
	11	9.02	6.89*	14.63	8.93*	7.31	8.64*	14.44	8.60*	10.46	8.35*
	12	10.31	6.88*	10.92	7.31*	6.03	6.43	12.60	7.17*	10.50	6.96*
	Total	10.27	6.89*	13.35	8.19*	7.39	7.74*	14.93	8.11*	11.01	7.70*
BP check past year	3	0.81	0.87*	0.79	0.91*	0.90	0.96*	0.91	0.97*	0.81	0.91*
	4	0.79	0.90*	0.78	0.92*	0.89	0.96*	0.90	0.97*	0.79	0.91*
	6	0.79	0.91*	0.76	0.93*	0.90	0.97*	0.89	0.98*	0.81	0.92*
	7/8	0.79	0.90*	0.74	0.90*	0.90	0.93	0.87	0.95*	0.80	0.89*
	9	0.75	0.87*	0.80	0.91*	0.94	0.97	0.85	0.96*	0.81	0.89*
	10	0.67	0.91*	0.84	0.92*	0.91	0.96*	0.88	0.97*	0.83	0.91*
	11	0.84	0.92*	0.77	0.93*	0.91	0.94	0.87	0.94*	0.80	0.90*
	12	0.86	0.92	0.79	0.93*	0.90	0.94	0.89	0.89	0.82	0.91*
	Total	0.79	0.90*	0.78	0.91*	0.90	0.96*	0.89	0.96*	0.81	0.91*
Cholesterol check past year	3	0.49	0.36*	0.47	0.52*	0.72	0.72	0.63	0.67	0.55	0.57*
	4	0.45	0.38*	0.49	0.48	0.69	0.61*	0.60	0.60	0.52	0.52
	6	0.45	0.40	0.44	0.53*	0.64	0.65	0.62	0.62	0.51	0.54*
	7/8	0.47	0.40*	0.40	0.46*	0.63	0.67	0.61	0.55	0.51	0.51
	9	0.34	0.30	0.47	0.44	0.75	0.71	0.53	0.48	0.49	0.46
	10	0.40	0.38	0.54	0.54	0.71	0.66	0.62	0.70	0.58	0.56
	11	0.46	0.38	0.41	0.47	0.66	0.61	0.51	0.50	0.50	0.48
	12	0.54	0.36*	0.38	0.41	0.70	0.62	0.49	0.58	0.48	0.42*
	Total	0.44	0.37*	0.45	0.49*	0.68	0.67	0.60	0.60	0.52	0.52

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Table C-1—Continued

Measure	Region	Military Status (Source of Care)									
		AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Dental care past year	3	0.88	0.86	0.39	0.62*	0.69	0.69	0.44	0.68*	0.59	0.69*
	4	0.89	0.84*	0.43	0.58*	0.69	0.72	0.47	0.63*	0.59	0.68*
	6	0.86	0.85	0.42	0.53*	0.66	0.58*	0.44	0.55*	0.57	0.61*
	7/8	0.89	0.85*	0.44	0.63*	0.67	0.70	0.40	0.68*	0.58	0.70*
	9	0.90	0.83*	0.58	0.61	0.76	0.74	0.49	0.60*	0.70	0.70
	10	0.91	0.83*	0.49	0.64*	0.75	0.73	0.45	0.60*	0.63	0.69*
	11	0.89	0.88	0.47	0.63*	0.68	0.67	0.42	0.61*	0.61	0.68*
	12	0.94	0.89	0.64	0.64	0.76	0.74	0.56	0.65	0.75	0.77
	Total	0.89	0.85*	0.45	0.60*	0.69	0.68	0.44	0.62*	0.60	0.68*
Fewer than 3 calls to get appointment	3	0.57	0.78*	0.57	0.86*	0.75	0.97*	0.54	0.81*	0.64	0.89*
	4	0.56	0.85*	0.52	0.87*	0.79	0.97*	0.52	0.77*	0.66	0.91*
	6	0.53	0.78*	0.54	0.83*	0.77	0.97*	0.40	0.79*	0.58	0.87*
	7/8	0.61	0.84*	0.58	0.92*	0.76	0.97*	0.57	0.81*	0.64	0.91*
	9	0.54	0.82*	0.64	0.87*	0.77	0.98*	0.56	0.88*	0.65	0.89*
	10	0.70	0.89*	0.67	0.88*	0.73	0.95*	0.59	0.92*	0.68	0.92*
	11	0.61	0.88*	0.53	0.89*	0.80	0.96*	0.54	0.77*	0.65	0.91*
	12	0.61	0.83*	0.56	0.84*	0.76	0.98*	0.47	0.77*	0.60	0.86*
	Total	0.58	0.82*	0.57	0.87*	0.76	0.97*	0.51	0.82*	0.63	0.90*
Flu shot past year	3	0.84	0.79*	0.31	0.30	0.44	0.54*	0.42	0.47	0.44	0.51*
	4	0.76	0.77	0.29	0.30	0.43	0.56*	0.43	0.50	0.41	0.51*
	6	0.78	0.83*	0.41	0.40	0.45	0.56*	0.45	0.54*	0.47	0.56*
	7/8	0.78	0.85*	0.40	0.36	0.47	0.63*	0.51	0.56	0.48	0.58*
	9	0.80	0.81	0.29	0.33	0.52	0.66*	0.46	0.47	0.51	0.58*
	10	0.85	0.81	0.31	0.36	0.53	0.57	0.53	0.48	0.49	0.52
	11	0.79	0.83	0.40	0.42	0.48	0.61*	0.42	0.49	0.46	0.57*
	12	0.83	0.80	0.41	0.21*	0.58	0.56	0.45	0.45	0.58	0.55*
	Total	0.80	0.82*	0.34	0.35	0.47	0.58*	0.46	0.50*	0.46	0.54*
Interpersonal concern of providers	3	0.50	0.79*	0.63	0.86*	0.83	0.95*	0.61	0.88*	0.69	0.89*
	4	0.48	0.79*	0.64	0.89*	0.82	0.95*	0.65	0.86*	0.69	0.90*
	6	0.54	0.77*	0.65	0.85*	0.88	0.96*	0.58	0.79*	0.69	0.87*
	7/8	0.48	0.81*	0.62	0.88*	0.86	0.95*	0.58	0.82*	0.67	0.89*
	9	0.46	0.83*	0.64	0.86*	0.87	0.95*	0.68	0.83*	0.68	0.87*
	10	0.52	0.82*	0.70	0.92*	0.88	0.97*	0.68	0.91*	0.77	0.93*
	11	0.50	0.79*	0.70	0.89*	0.88	0.95*	0.55	0.81*	0.71	0.89*
	12	0.49	0.84*	0.63	0.87*	0.92	0.98*	0.65	0.85*	0.62	0.87*
	Total	0.51	0.80*	0.64	0.87*	0.85	0.95*	0.61	0.84*	0.69	0.89*

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Table C-1—Continued

Measure	Region	Military Status (Source of Care)									
		AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Mammogram past year (40+)	3	—	—	0.67	0.71	0.75	0.76	0.74	0.77	0.66	0.71
	4	—	—	0.62	0.60	0.72	0.67	0.65	0.76*	0.64	0.65
	6	—	—	0.52	0.65*	0.68	0.71	0.59	0.65	0.60	0.66
	7/8	—	—	0.67	0.66	0.74	0.69	0.76	0.82	0.66	0.67
	9	—	—	0.73	0.67	0.70	0.72	0.68	0.62	0.67	0.65
	10	—	—	0.76	0.70	0.74	0.72	—	—	0.70	0.68
	11	—	—	0.57	0.61	0.70	0.69	0.72	0.55*	0.64	0.62
	12	—	—	—	—	0.50	0.76*	—	—	0.54	0.59*
	Total	—	—	0.65	0.65	0.72	0.71	0.68	0.69	0.65	0.67
Mammogram past year (50+)	3	—	—	0.75	0.71	0.77	0.76	0.73	0.79	0.70	0.74
	4	—	—	0.65	0.61	0.73	0.70	0.73	0.81	0.68	0.68
	6	—	—	0.46	0.70*	0.70	0.78	0.64	0.70	0.61	0.72*
	7/8	—	—	0.73	0.74	0.75	0.75	0.76	0.84	0.70	0.72
	9	—	—	0.79	0.78	0.75	0.72	0.71	0.69	0.71	0.70
	10	—	—	0.82	0.76	0.78	0.76	—	—	0.75	0.72
	11	—	—	0.63	0.64	0.69	0.72	0.80	0.66	0.67	0.65
	12	—	—	—	—	0.40	0.85*	—	—	0.55	0.72*
	Total	—	—	0.67	0.70	0.74	0.74	0.72	0.75	0.68	0.71*
PAP test past year	3	0.88	0.77*	0.71	0.67	0.70	0.67	0.71	0.70	0.69	0.67
	4	0.82	0.75	0.70	0.69	0.72	0.59*	0.71	0.70	0.67	0.63
	6	0.85	0.84	0.72	0.67	0.69	0.69	0.70	0.67	0.70	0.68
	7/8	0.84	0.77	0.76	0.70*	0.68	0.61	0.73	0.70	0.69	0.66*
	9	0.90	0.83	0.75	0.70	0.66	0.69	0.79	0.63*	0.73	0.67*
	10	0.80	0.83	0.74	0.67	0.71	0.60*	0.78	0.70	0.69	0.62*
	11	0.84	0.78	0.70	0.67	0.74	0.60*	0.72	0.61	0.71	0.62*
	12	—	—	0.71	0.73	0.65	0.67	0.73	0.66	0.67	0.69
	Total	0.84	0.79	0.72	0.68	0.69	0.64*	0.73	0.67	0.69	0.66*
Physical exam past year	3	0.52	0.42*	0.48	0.56*	0.71	0.68	0.59	0.68*	0.56	0.57
	4	0.54	0.50	0.47	0.54*	0.67	0.61	0.58	0.55	0.53	0.54
	6	0.50	0.47	0.48	0.55*	0.68	0.69	0.55	0.50	0.54	0.55
	7/8	0.49	0.49	0.43	0.52*	0.70	0.72	0.57	0.59	0.54	0.56
	9	0.42	0.44	0.57	0.56	0.73	0.68	0.56	0.61	0.56	0.54
	10	0.50	0.44	0.60	0.57	0.69	0.61*	0.64	0.65	0.60	0.55
	11	0.57	0.48*	0.46	0.53	0.72	0.63*	0.55	0.55	0.56	0.53*
	12	0.44	0.45	0.44	0.54	0.66	0.63	0.59	0.59	0.49	0.51
	Total	0.49	0.46*	0.49	0.54*	0.70	0.66*	0.56	0.59	0.55	0.55

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Table C-1—Continued

		Military Status (Source of Care)									
		AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
Measure	Region	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Prenatal care first trimester	3	—	—	0.88	0.88	—	—	—	—	0.90	0.89
	4	—	—	0.92	0.95	—	—	—	—	0.93	0.94
	6	—	—	0.96	0.91	—	—	—	—	0.93	0.89
	7/8	—	—	0.87	0.88	—	—	—	—	0.93	0.89
	9	—	—	0.98	0.91	—	—	—	—	0.99	0.93
	10	—	—	—	—	—	—	—	—	—	—
	11	—	—	0.84	0.82	—	—	—	—	0.87	0.84
	12	—	—	—	—	—	—	—	—	—	—
Total	—	—	0.93	0.90	—	—	—	—	0.93	0.90	
Prostate check past year (age race dependent)	3	—	—	0.50	0.66*	0.69	0.78	0.73	0.79	0.58	0.70*
	4	—	—	0.61	0.60	0.72	0.74	0.70	0.67	0.61	0.66
	6	—	—	0.59	0.65	0.72	0.74	0.74	0.80	0.62	0.68
	7/8	—	—	0.52	0.56	0.76	0.70	0.77	0.64*	0.67	0.61
	9	—	—	0.63	0.57	0.75	0.77	0.69	0.63	0.66	0.65
	10	—	—	0.75	0.62*	0.80	0.65*	0.74	0.60	0.72	0.59*
	11	—	—	0.54	0.57	0.72	0.69	0.65	0.65	0.62	0.61
	12	—	—	—	—	0.79	0.57*	—	—	0.60	0.57*
Total	—	—	0.59	0.61	0.74	0.73	0.71	0.71	0.63	0.65*	
Satisfied with:											
Ability to diagnose	3	0.63	0.70*	0.72	0.82*	0.90	0.95*	0.72	0.86*	0.78	0.86*
	4	0.63	0.76*	0.74	0.84*	0.90	0.93*	0.75	0.80	0.81	0.86*
	6	0.63	0.70*	0.73	0.83*	0.91	0.94	0.69	0.81*	0.77	0.84*
	7/8	0.63	0.72*	0.77	0.81	0.90	0.91	0.71	0.83*	0.78	0.83*
	9	0.57	0.75*	0.84	0.86	0.94	0.94	0.71	0.80	0.77	0.84*
	10	0.64	0.83*	0.78	0.89*	0.93	0.96	0.80	0.88	0.84	0.92*
	11	0.65	0.75*	0.80	0.85*	0.88	0.91	0.74	0.79	0.79	0.85*
	12	0.56	0.76*	0.78	0.83	0.94	0.97*	0.67	0.75	0.69	0.81*
Total	0.63	0.73*	0.76	0.83*	0.91	0.94*	0.72	0.82*	0.78	0.85*	
Access to care if needed	3	0.61	0.63	0.64	0.79*	0.90	0.94*	0.56	0.55	0.72	0.79*
	4	0.55	0.64*	0.61	0.78*	0.92	0.94	0.54	0.50	0.72	0.79*
	6	0.56	0.66*	0.53	0.77*	0.91	0.94	0.51	0.55	0.67	0.78*
	7/8	0.59	0.64*	0.63	0.81*	0.90	0.94*	0.55	0.65	0.70	0.81*
	9	0.58	0.70*	0.79	0.80	0.94	0.95	0.75	0.76	0.77	0.81
	10	0.60	0.75*	0.73	0.78	0.91	0.93	0.64	0.61	0.79	0.83*
	11	0.60	0.73*	0.72	0.82*	0.94	0.96	0.57	0.59	0.75	0.83*
	12	0.67	0.76	0.73	0.82	0.99	1.00	0.65	0.60	0.73	0.81*
Total	0.59	0.67*	0.65	0.79*	0.92	0.94*	0.58	0.60	0.72	0.80*	

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Table C-1—Continued

Measure	Region	Military Status (Source of Care)									
		AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Access to emergency care	3	0.71	0.65*	0.73	0.78*	0.91	0.95*	0.65	0.70	0.79	0.82*
	4	0.63	0.63	0.71	0.80*	0.93	0.94	0.68	0.53*	0.78	0.81*
	6	0.66	0.68	0.70	0.77*	0.91	0.94	0.64	0.69	0.76	0.81
	7/8	0.65	0.65	0.77	0.76	0.87	0.96*	0.66	0.70	0.77	0.81*
	9	0.69	0.76	0.83	0.81	0.94	0.92	0.75	0.74	0.81	0.82
	10	0.62	0.64	0.78	0.77	0.91	0.95	0.65	0.69	0.81	0.83
	11	0.76	0.81	0.84	0.85	0.93	0.96	0.73	0.73	0.84	0.87
	12	0.76	0.79	0.82	0.82	0.97	0.96	0.78	0.78	0.79	0.83
	Total	0.68	0.69	0.75	0.79*	0.92	0.95*	0.68	0.69	0.79	0.82*
Access to hospital care	3	0.70	0.72	0.78	0.86*	0.93	0.96	0.61	0.66	0.80	0.86*
	4	0.66	0.72	0.73	0.84*	0.94	0.96	0.67	0.56*	0.80	0.85*
	6	0.71	0.76	0.71	0.84*	0.94	0.94	0.67	0.72	0.79	0.85*
	7/8	0.68	0.74*	0.80	0.86*	0.95	0.97*	0.70	0.75	0.81	0.87*
	9	0.64	0.79*	0.84	0.85	0.96	0.95	0.75	0.82	0.81	0.86
	10	0.70	0.78	0.77	0.79	0.95	0.94	0.67	0.61	0.84	0.85
	11	0.66	0.80*	0.86	0.89	0.97	0.99	0.66	0.68	0.83	0.89*
	12	0.70	0.84*	0.88	0.87	0.97	0.99	0.74	0.74	0.80	0.87
	Total	0.69	0.76*	0.78	0.85*	0.95	0.96	0.68	0.70	0.80	0.86*
Access to specialist	3	0.41	0.50*	0.54	0.75*	0.88	0.94*	0.43	0.51	0.65	0.76*
	4	0.39	0.56*	0.51	0.70*	0.90	0.93	0.43	0.51	0.65	0.77*
	6	0.43	0.54*	0.49	0.71*	0.91	0.91	0.42	0.53*	0.63	0.73*
	7/8	0.40	0.53*	0.55	0.75*	0.88	0.94*	0.47	0.57	0.63	0.77*
	9	0.33	0.59*	0.67	0.71	0.91	0.91	0.52	0.59	0.65	0.72*
	10	0.43	0.69*	0.64	0.76*	0.93	0.93	0.56	0.62	0.75	0.83*
	11	0.39	0.61*	0.63	0.75*	0.93	0.94	0.54	0.61	0.69	0.78*
	12	0.52	0.65*	0.61	0.73*	0.94	0.99*	0.56	0.64	0.60	0.73*
	Total	0.41	0.56*	0.56	0.73*	0.90	0.93*	0.46	0.55*	0.65	0.76*
Administrative staff courtesy	3	0.63	0.87*	0.75	0.92*	0.93	0.97*	0.73	0.90*	0.80	0.93*
	4	0.58	0.86*	0.79	0.93*	0.90	0.98*	0.77	0.95*	0.80	0.95*
	6	0.62	0.84*	0.77	0.90*	0.94	0.99*	0.71	0.91*	0.78	0.92*
	7/8	0.62	0.88*	0.72	0.92*	0.93	0.98*	0.71	0.91*	0.78	0.94*
	9	0.57	0.88*	0.81	0.91*	0.95	0.99*	0.72	0.89*	0.78	0.92*
	10	0.69	0.91*	0.81	0.94*	0.95	0.98*	0.76	0.97*	0.86	0.96*
	11	0.63	0.88*	0.74	0.93*	0.97	0.98	0.69	0.93*	0.80	0.94*
	12	0.57	0.89*	0.69	0.90*	0.98	0.99	0.66	0.85*	0.69	0.91*
	Total	0.62	0.87*	0.77	0.92*	0.93	0.98*	0.72	0.91*	0.79	0.93*

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Table C-1—Continued

Measure	Region	Military Status (Source of Care)									
		AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Appointment gap	3	0.50	0.65*	0.56	0.75*	0.88	0.92	0.50	0.61*	0.68	0.78*
	4	0.51	0.71*	0.60	0.76*	0.90	0.89	0.55	0.54	0.71	0.79*
	6	0.49	0.65*	0.50	0.74*	0.89	0.91	0.47	0.61*	0.63	0.77*
	7/8	0.51	0.66*	0.58	0.80*	0.91	0.90	0.48	0.67*	0.66	0.80*
	9	0.49	0.71*	0.73	0.76	0.92	0.90	0.66	0.70	0.73	0.78*
	10	0.54	0.73*	0.73	0.76	0.89	0.91	0.64	0.69	0.76	0.82*
	11	0.56	0.69*	0.68	0.76*	0.90	0.92	0.53	0.60	0.71	0.79*
	12	0.48	0.75*	0.66	0.80*	0.97	0.98	0.57	0.74*	0.62	0.80*
	Total	0.51	0.68*	0.60	0.76*	0.89	0.91	0.52	0.63*	0.68	0.78*
Attention by provider	3	0.68	0.82*	0.73	0.86*	0.88	0.95*	0.74	0.83*	0.78	0.89*
	4	0.66	0.83*	0.78	0.87*	0.87	0.94*	0.76	0.85*	0.80	0.90*
	6	0.67	0.80*	0.74	0.85*	0.92	0.97*	0.66	0.84*	0.77	0.89*
	7/8	0.67	0.81*	0.75	0.88*	0.91	0.94	0.71	0.85*	0.78	0.89*
	9	0.67	0.86*	0.83	0.87	0.92	0.94	0.81	0.84	0.80	0.89*
	10	0.77	0.89*	0.83	0.93*	0.91	0.94	0.81	0.87	0.85	0.92*
	11	0.67	0.83*	0.81	0.90*	0.92	0.94	0.70	0.85*	0.81	0.90*
	12	0.64	0.85*	0.80	0.88	0.97	0.97	0.78	0.85	0.74	0.87*
	Total	0.67	0.83*	0.77	0.87*	0.90	0.95*	0.73	0.84*	0.79	0.89*
Availability of information by phone	3	0.39	0.61*	0.47	0.75*	0.79	0.89*	0.41	0.58*	0.59	0.77*
	4	0.36	0.66*	0.46	0.73*	0.79	0.84	0.44	0.53	0.60	0.75*
	6	0.34	0.63*	0.54	0.72*	0.84	0.87	0.37	0.51*	0.58	0.74*
	7/8	0.37	0.68*	0.48	0.79*	0.84	0.89	0.43	0.67*	0.58	0.79*
	9	0.36	0.63*	0.59	0.74*	0.84	0.89*	0.45	0.63*	0.60	0.74*
	10	0.31	0.70*	0.62	0.73*	0.84	0.90*	0.49	0.60	0.67	0.80*
	11	0.38	0.67*	0.56	0.78*	0.86	0.87	0.45	0.53	0.63	0.77*
	12	0.42	0.69*	0.54	0.79*	0.92	0.97*	0.44	0.60	0.54	0.77*
	Total	0.37	0.64*	0.52	0.75*	0.82	0.88*	0.42	0.57*	0.59	0.76*
Availability of prescription services	3	0.76	0.81	0.86	0.86	0.91	0.92	0.82	0.85	0.85	0.87
	4	0.77	0.86*	0.85	0.89*	0.93	0.90	0.84	0.86	0.87	0.88*
	6	0.75	0.82*	0.81	0.85	0.91	0.92	0.81	0.86	0.83	0.87*
	7/8	0.78	0.82*	0.82	0.86*	0.95	0.95	0.83	0.89	0.86	0.89*
	9	0.69	0.84*	0.84	0.90*	0.95	0.93	0.83	0.88	0.84	0.89*
	10	0.70	0.82*	0.83	0.85	0.94	0.95	0.85	0.93*	0.88	0.90*
	11	0.73	0.86*	0.85	0.86	0.96	0.94	0.76	0.81	0.85	0.88*
	12	0.85	0.92*	0.74	0.92*	0.97	0.95	0.92	0.91	0.88	0.93*
	Total	0.76	0.83*	0.83	0.87*	0.93	0.92	0.82	0.87	0.85	0.88*

Continued on next page

Table C-1—Continued

Measure	Region	Military Status (Source of Care)									
		AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Convenience of hours	3	0.62	0.71*	0.79	0.85*	0.93	0.97*	0.75	0.83*	0.81	0.87*
	4	0.60	0.74*	0.81	0.87*	0.93	0.94	0.79	0.84	0.82	0.88*
	6	0.64	0.75*	0.76	0.86*	0.92	0.97*	0.73	0.79	0.79	0.87*
	7/8	0.62	0.73*	0.79	0.84*	0.95	0.97	0.72	0.87*	0.79	0.87*
	9	0.65	0.77*	0.81	0.86	0.95	0.95	0.80	0.86	0.82	0.86*
	10	0.55	0.76*	0.82	0.87*	0.96	0.96	0.81	0.83	0.86	0.89*
	11	0.66	0.78*	0.85	0.90*	0.94	0.98*	0.78	0.81	0.84	0.90*
	12	0.70	0.77	0.73	0.84*	0.98	0.98	0.81	0.86	0.77	0.84
	Total	0.64	0.74*	0.79	0.86*	0.94	0.96*	0.76	0.83*	0.81	0.87*
Convenience of treatment location	3	0.79	0.82	0.79	0.85*	0.90	0.95*	0.73	0.75	0.82	0.87*
	4	0.79	0.84*	0.81	0.86*	0.90	0.93*	0.76	0.76	0.83	0.88*
	6	0.87	0.89	0.79	0.88*	0.91	0.94	0.69	0.74	0.83	0.89*
	7/8	0.81	0.85*	0.84	0.87	0.90	0.91	0.74	0.75	0.83	0.87
	9	0.77	0.84	0.86	0.85	0.94	0.94	0.80	0.87	0.84	0.88
	10	0.85	0.84	0.79	0.84*	0.93	0.96	0.55	0.62	0.83	0.88*
	11	0.81	0.87*	0.83	0.87	0.88	0.91	0.77	0.79	0.84	0.88*
	12	0.84	0.89	0.89	0.92	0.94	0.97*	0.81	0.79	0.87	0.91
	Total	0.81	0.86*	0.82	0.87*	0.91	0.94*	0.72	0.77	0.83	0.88*
Ease of making an appointment	3	0.48	0.57*	0.54	0.75*	0.92	0.95*	0.47	0.62*	0.68	0.79*
	4	0.48	0.69*	0.49	0.79*	0.95	0.97*	0.46	0.53	0.68	0.83*
	6	0.39	0.54*	0.43	0.74*	0.95	0.98*	0.40	0.56*	0.60	0.77*
	7/8	0.50	0.65*	0.55	0.83*	0.96	0.96	0.46	0.64*	0.67	0.82*
	9	0.45	0.67*	0.72	0.81*	0.97	0.95	0.65	0.72	0.73	0.80*
	10	0.53	0.71*	0.74	0.81*	0.93	0.95	0.59	0.74	0.77	0.86*
	11	0.44	0.69*	0.57	0.81*	0.97	0.97	0.40	0.56*	0.68	0.82*
	12	0.46	0.69*	0.54	0.75*	0.99	1.00	0.52	0.55	0.58	0.75*
	Total	0.47	0.63*	0.56	0.78*	0.95	0.96*	0.47	0.61*	0.67	0.80*
Explanation of medical tests	3	0.70	0.74	0.75	0.85*	0.87	0.94*	0.76	0.86*	0.80	0.87*
	4	0.63	0.77*	0.75	0.85*	0.90	0.91	0.78	0.84*	0.80	0.86*
	6	0.66	0.75*	0.75	0.83*	0.94	0.93	0.74	0.78	0.80	0.85*
	7/8	0.67	0.77*	0.76	0.85*	0.92	0.96	0.75	0.80	0.80	0.87*
	9	0.62	0.77*	0.81	0.85	0.92	0.94	0.79	0.82	0.79	0.85*
	10	0.69	0.84*	0.81	0.86	0.90	0.93	0.84	0.88	0.85	0.89*
	11	0.66	0.78*	0.85	0.90*	0.92	0.94	0.74	0.74	0.83	0.87*
	12	0.65	0.79*	0.78	0.83	0.96	0.98	0.76	0.72	0.75	0.83*
	Total	0.66	0.76*	0.77	0.85*	0.90	0.94*	0.76	0.81*	0.80	0.86*

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Table C-1—Continued

Measure	Region	Military Status (Source of Care)									
		AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Explanation of procedures	3	0.71	0.75	0.76	0.85*	0.87	0.96*	0.75	0.81	0.80	0.87*
	4	0.67	0.77*	0.77	0.87*	0.91	0.94	0.78	0.81	0.82	0.88*
	6	0.70	0.76*	0.75	0.83*	0.94	0.94	0.74	0.77	0.81	0.85*
	7/8	0.69	0.77*	0.79	0.83	0.92	0.96*	0.74	0.80	0.80	0.87*
	9	0.60	0.77*	0.81	0.87*	0.93	0.95	0.82	0.84	0.80	0.86*
	10	0.75	0.84*	0.81	0.87*	0.91	0.93	0.85	0.88	0.86	0.89*
	11	0.68	0.79*	0.85	0.89*	0.94	0.96	0.75	0.73	0.83	0.88*
	12	0.66	0.81*	0.74	0.85*	0.96	1.00*	0.77	0.71	0.75	0.85*
	Total	0.69	0.77*	0.78	0.85*	0.91	0.95*	0.76	0.80	0.81	0.87*
Satisfied with outcome of health care	3	0.70	0.75	0.79	0.84*	0.89	0.96*	0.77	0.87*	0.81	0.87*
	4	0.69	0.77*	0.80	0.85*	0.93	0.94	0.78	0.86*	0.83	0.88*
	6	0.67	0.73*	0.75	0.85*	0.95	0.95	0.74	0.82	0.80	0.85*
	7/8	0.71	0.76*	0.78	0.85*	0.92	0.97*	0.75	0.83*	0.81	0.88*
	9	0.64	0.78*	0.86	0.87	0.94	0.94	0.81	0.85	0.82	0.86
	10	0.64	0.80*	0.80	0.88*	0.93	0.94	0.83	0.88	0.86	0.90*
	11	0.63	0.80*	0.84	0.89*	0.93	0.95	0.78	0.75	0.82	0.88*
	12	0.56	0.79*	0.80	0.88	0.98	0.99*	0.73	0.69	0.72	0.84*
	Total	0.68	0.76*	0.79	0.85*	0.92	0.95*	0.76	0.83*	0.81	0.87*
Satisfied with overall quality of care	3	0.66	0.73*	0.79	0.85*	0.90	0.97*	0.74	0.85*	0.80	0.88*
	4	0.67	0.77*	0.77	0.88*	0.94	0.97*	0.75	0.81	0.82	0.89*
	6	0.67	0.74*	0.71	0.86*	0.96	0.97	0.70	0.76	0.79	0.86*
	7/8	0.67	0.75*	0.79	0.86*	0.93	0.97*	0.75	0.81	0.81	0.87*
	9	0.65	0.77*	0.86	0.89	0.95	0.96	0.84	0.89	0.83	0.88*
	10	0.56	0.78*	0.83	0.89*	0.94	0.95	0.82	0.80	0.85	0.90*
	11	0.67	0.80*	0.84	0.91*	0.94	0.97	0.76	0.77	0.83	0.89*
	12	0.59	0.80*	0.81	0.90*	0.98	0.99	0.73	0.74	0.74	0.86*
	Total	0.66	0.76*	0.79	0.87*	0.93	0.97*	0.75	0.81*	0.81	0.88*
Satisfied with skill of provider	3	0.69	0.77*	0.78	0.87*	0.93	0.97*	0.77	0.90*	0.82	0.89*
	4	0.72	0.81*	0.81	0.88*	0.93	0.94	0.81	0.87*	0.85	0.89*
	6	0.70	0.77*	0.80	0.88*	0.92	0.97*	0.76	0.86*	0.81	0.89*
	7/8	0.70	0.78*	0.78	0.85*	0.95	0.97	0.80	0.91*	0.84	0.89*
	9	0.59	0.78*	0.85	0.87	0.95	0.95	0.82	0.87	0.81	0.87*
	10	0.68	0.86*	0.85	0.91*	0.96	0.96	0.86	0.85	0.89	0.92*
	11	0.72	0.81*	0.86	0.91*	0.94	0.98*	0.80	0.84	0.85	0.91*
	12	0.68	0.85*	0.77	0.90*	0.98	0.98	0.75	0.80	0.75	0.88*
	Total	0.69	0.79*	0.81	0.88*	0.94	0.96*	0.79	0.87*	0.83	0.89*

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Table C-1—Continued

Measure	Region	Military Status (Source of Care)									
		AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Satisfied with thoroughness of exam	3	0.67	0.75*	0.75	0.85*	0.89	0.95*	0.70	0.87*	0.78	0.87*
	4	0.66	0.78*	0.78	0.85*	0.92	0.95	0.78	0.80	0.81	0.88*
	6	0.67	0.75*	0.72	0.84*	0.94	0.93	0.69	0.81*	0.78	0.85*
	7/8	0.67	0.76*	0.76	0.83*	0.94	0.98*	0.73	0.79	0.80	0.87*
	9	0.60	0.77*	0.79	0.86*	0.91	0.92	0.73	0.81	0.76	0.85*
	10	0.68	0.84*	0.77	0.86*	0.93	0.93	0.83	0.90	0.85	0.90*
	11	0.65	0.79*	0.82	0.88*	0.92	0.95	0.74	0.81	0.81	0.88*
	12	0.65	0.80*	0.75	0.86*	0.98	1.00	0.76	0.72	0.73	0.84*
	Total	0.66	0.77*	0.76	0.85*	0.92	0.95*	0.73	0.82*	0.79	0.87*
Satisfied with thoroughness of treatment	3	0.67	0.74*	0.79	0.85*	0.89	0.96*	0.74	0.87*	0.80	0.88*
	4	0.70	0.77*	0.79	0.84*	0.93	0.97*	0.75	0.83*	0.82	0.88*
	6	0.68	0.73	0.76	0.85*	0.95	0.97	0.71	0.79	0.81	0.86*
	7/8	0.66	0.74*	0.78	0.85*	0.92	0.97*	0.78	0.84	0.81	0.87*
	9	0.59	0.77*	0.83	0.84	0.95	0.92	0.79	0.83	0.79	0.84*
	10	0.66	0.81*	0.81	0.89*	0.95	0.95	0.83	0.88	0.87	0.91*
	11	0.69	0.78*	0.85	0.88	0.95	0.96	0.76	0.81	0.84	0.88*
	12	0.57	0.79*	0.85	0.88	0.98	0.99	0.73	0.73	0.72	0.85*
	Total	0.66	0.75*	0.80	0.85*	0.93	0.96*	0.76	0.83*	0.81	0.87*
Satisfied with time spent with provider	3	0.64	0.78*	0.68	0.81*	0.85	0.91*	0.71	0.85*	0.75	0.85*
	4	0.62	0.77*	0.67	0.84*	0.85	0.87	0.72	0.85*	0.75	0.84*
	6	0.60	0.75*	0.70	0.81*	0.91	0.90	0.64	0.74	0.74	0.83*
	7/8	0.62	0.77*	0.71	0.82*	0.88	0.92	0.67	0.83*	0.75	0.85*
	9	0.51	0.80*	0.73	0.82*	0.88	0.89	0.70	0.76	0.72	0.83*
	10	0.59	0.83*	0.75	0.87*	0.88	0.93*	0.72	0.86*	0.80	0.90*
	11	0.62	0.77*	0.76	0.88*	0.90	0.93	0.63	0.75	0.77	0.87*
	12	0.63	0.80*	0.70	0.84*	0.95	0.99*	0.73	0.85	0.71	0.85*
	Total	0.61	0.78*	0.71	0.83*	0.87	0.90*	0.69	0.80*	0.75	0.85*
Satisfied with waiting time to see provider	3	0.43	0.57*	0.58	0.70*	0.83	0.85	0.53	0.63*	0.64	0.73*
	4	0.46	0.64*	0.59	0.75*	0.84	0.77*	0.58	0.58	0.67	0.72*
	6	0.44	0.59*	0.56	0.72*	0.82	0.84	0.57	0.65	0.62	0.73*
	7/8	0.48	0.65*	0.60	0.77*	0.82	0.86	0.59	0.74*	0.65	0.77*
	9	0.42	0.61*	0.63	0.71*	0.88	0.89	0.56	0.64	0.65	0.73*
	10	0.46	0.63*	0.68	0.75*	0.88	0.87	0.62	0.81*	0.72	0.80*
	11	0.43	0.67*	0.65	0.77*	0.90	0.92	0.57	0.66	0.68	0.80*
	12	0.42	0.66*	0.55	0.75*	0.93	0.96	0.56	0.65	0.55	0.74*
	Total	0.44	0.62*	0.60	0.74*	0.84	0.85	0.57	0.65*	0.65	0.74*

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Table C-1—Continued

		Military Status (Source of Care)									
Measure	Region	AD (All)		Non-AD (Prime)		Non-AD (Civilian)		Non-AD (Other Nonenrolled)		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Used ER past year	3	0.48	0.32*	0.47	0.34*	0.34	0.23*	0.48	0.35*	0.42	0.29*
	4	0.50	0.31*	0.49	0.31*	0.31	0.17*	0.49	0.39*	0.41	0.27*
	6	0.50	0.33*	0.44	0.37*	0.30	0.25	0.49	0.43	0.42	0.33*
	7/8	0.53	0.32*	0.54	0.31*	0.30	0.21*	0.52	0.33*	0.45	0.28*
	9	0.41	0.31*	0.40	0.28*	0.33	0.24*	0.44	0.27*	0.39	0.27*
	10	0.36	0.23*	0.32	0.25*	0.35	0.27*	0.44	0.40	0.38	0.28*
	11	0.47	0.30*	0.50	0.36*	0.35	0.21*	0.51	0.34*	0.45	0.29*
	12	0.55	0.30*	0.46	0.32*	0.30	0.17*	0.54	0.46	0.51	0.30*
	Total	0.49	0.31*	0.46	0.33*	0.33	0.22*	0.49	0.37*	0.42	0.29*
Waited less than 30 minutes in provider office	3	0.70	0.74	0.69	0.77*	0.83	0.80	0.68	0.73	0.75	0.78*
	4	0.73	0.79*	0.73	0.81*	0.81	0.78	0.69	0.77	0.75	0.79*
	6	0.70	0.76*	0.72	0.79*	0.84	0.81	0.64	0.79*	0.74	0.79*
	7/8	0.77	0.80	0.79	0.87*	0.88	0.86	0.78	0.89*	0.81	0.85*
	9	0.71	0.74	0.78	0.80	0.92	0.90	0.64	0.75	0.79	0.81
	10	0.72	0.78	0.84	0.81	0.95	0.90*	0.69	0.81*	0.85	0.85
	11	0.74	0.77	0.76	0.86*	0.94	0.92	0.68	0.80*	0.82	0.86*
	12	0.66	0.79*	0.77	0.84	0.95	0.94	0.72	0.72	0.74	0.83
	Total	0.72	0.77*	0.75	0.81*	0.87	0.84	0.69	0.78*	0.78	0.81*



## APPENDIX D: EFFECT OF PCM TYPE ON PERCEPTIONS OF PRIME ENROLLEES BY TRICARE REGION

Tables D-1 and D-2 contrast the responses of Prime enrollees to survey items by region, with the focus on the effects of having a military versus a civilian provider. Entries marked with an asterisk (\*) indicate a statistically significant change ( $p < 0.05$ ).

In general, the results indicate that those with military providers tended to have higher levels of satisfaction than those with civilian providers. The pattern of results is consistent across regions. The data come from the 1998 DoD Beneficiary survey.

**Table D-1. Perceptual Differences of Prime Enrollees by PCM Type**

Measure	Region			
	3		4	
	Civilian	Military	Civilian	Military
Prime improves access to care	0.57	0.75*	0.64	0.74
Prime improves access to preventative care	0.62	0.77*	0.67	0.72
Easier to see specialist under Prime	0.38	0.51*	0.41	0.51
Easier to get phone advice under Prime	0.55	0.74*	0.58	0.67
Prime saves money for care	0.70	0.82*	0.70	0.75
Pregnant non-smoker	0.68	0.88	0.99	0.86*
Recommend Prime to friends	0.63	0.86*	0.73	0.89*
Satisfied with Prime	0.62	0.89*	0.76	0.93*

Measure	Region			
	6		7/8	
	Civilian	Military	Civilian	Military
Prime improves access to care	0.71	0.70	0.61	0.69
Prime improves access to preventative care	0.72	0.73	0.67	0.70
Easier to see specialist under Prime	0.43	0.54	0.37	0.48*
Easier to get phone advice under Prime	0.62	0.71	0.52	0.76*
Prime saves money for care	0.76	0.78	0.64	0.73
Pregnant non-smoker	0.91	0.87	0.99	0.86
Recommend Prime to friends	0.77	0.88*	0.63	0.86*
Satisfied with Prime	0.75	0.90*	0.70	0.90*

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Table D-1—Continued

Measure	Region			
	9		10	
	Civilian	Military	Civilian	Military
Prime improves access to care	0.78	0.84	0.79	0.80
Prime improves access to preventative care	0.83	0.81	0.83	0.76
Easier to see specialist under Prime	0.39	0.59*	0.51	0.67*
Easier to get phone advice under Prime	0.64	0.70	0.64	0.76
Prime saves money for care	0.84	0.88	0.85	0.73
Pregnant non-smoker	0.90	0.76	0.89	0.43*
Recommend Prime to friends	0.87	0.88	0.89	0.89
Satisfied with Prime	0.90	0.91	0.90	0.93

Measure	Region			
	11		12	
	Civilian	Military	Civilian	Military
Prime improves access to care	0.73	0.76	0.76	0.82
Prime improves access to preventative care	0.71	0.81*	0.63	0.82
Easier to see specialist under Prime	0.47	0.57	0.53	0.55
Easier to get phone advice under Prime	0.65	0.75	0.74	0.77
Prime saves money for care	0.76	0.82	0.84	0.83
Pregnant non-smoker	n/a	n/a	0.67	0.83
Recommend Prime to friends	0.71	0.89*	0.58	0.92*
Satisfied with Prime	0.77	0.92*	0.69	0.92*

**Table D-2. Additional Measures: Effect of PCM Type on Prime Enrollee Preventive Care and Wait Time for Appointments**

Measure	Region			
	3		4	
	Civilian	Military	Civilian	Military
<i>Preventive care</i>				
Pregnant and did not smoke	0.68	0.88	0.99	0.86*
Know results of blood pressure check	0.96	0.90	0.92	0.94
Breast exam past year (age 40+)	0.77	0.74	0.62	0.71
Did not chew tobacco past year (all ages)	0.98	0.98	0.99	0.96
Cholesterol test past 5 years	0.81	0.77	0.75	0.78
Dental care past year	0.62	0.62	0.62	0.58
Did not chew tobacco past year (age 18–24)	1.00	0.90	–	–
Flu shot (age 65+)	–	–	0.43	0.82
Mammogram past year (age 50+)	0.83	0.71	0.59	0.72
Ever had mammogram (age 40–49)	0.97	0.98	0.87	0.95
Mammogram past 2 years (age 50+)	0.95	0.89	0.77	0.84
PAP smear past 3 years	0.90	0.95*	0.88	0.95*
Ever had PAP test	0.99	0.98	0.99	1.00
Physical exam past year	0.60	0.52	0.53	0.52
First trimester care	0.96	0.81	–	–
Prostate check (age 50+)	0.72	0.62	0.51	0.65
Prostate check (age 40+/B, 50+W)	0.63	0.62	0.50	0.65
Not smoke (age 18–24)	0.97	0.71	0.86	0.71
<i>Waiting time for an appointment</i>				
Minor care (days)	2.68	2.40	2.10	2.72*
Routine care (days)	12.57	12.71	10.72	12.50*
Urgent care (days)	0.96	0.64*	0.89	0.67*
Minor care (< 3 days)	0.77	0.85	0.83	0.80
Routine care (< 30 days)	0.89	0.91	0.96	0.93
Urgent care (1 day)	0.71	0.87*	0.73	0.88*

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Table D-2—Continued

Measure	Region			
	6		7/8	
	Civilian	Military	Civilian	Military
<i>Preventive care</i>				
Pregnant and did not smoke	0.91	0.87	0.99	0.86
Know results of blood pressure check	0.95	0.93	0.90	0.92
Breast exam past year (age 40+)	0.73	0.78	0.67	0.77
Did not chew tobacco past year (all ages)	0.96	0.96	0.98	0.98
Cholesterol test past 5 years	0.78	0.78	0.65	0.75*
Dental care past year	0.51	0.58	0.56	0.66
Did not chew tobacco past year (age 18–24)	0.77	0.84	0.54	0.59
Flu shot (age 65+)	0.83	0.88	0.73	0.85
Mammogram past year (age 50+)	0.74	0.71	0.60	0.75*
Ever had mammogram (age 40–49)	0.93	0.96	0.88	0.91
Mammogram past 2 years (age 50+)	0.90	0.92	0.67	0.87*
PAP smear past 3 years	0.91	0.94	0.88	0.93*
Ever had PAP test	1.00	0.99	0.98	0.99
Physical exam past year	0.56	0.56	0.56	0.50
First trimester care	0.95	0.97	0.96	0.89
Prostate check (age 50+)	0.58	0.67	0.59	0.68
Prostate check (age 40+/B, 50+W)	0.56	0.69*	0.58	0.67
Not smoke (age 18–24)	0.63	0.86*	0.81	0.65*
<i>Waiting time for an appointment</i>				
Minor care (days)	2.80	3.09	0.43	3.16*
Routine care (days)	11.66	13.76	12.36	12.32
Urgent care (days)	0.65	0.70	0.72	0.69
Minor care (< 3 days)	0.81	0.79	0.94	0.74*
Routine care (< 30 days)	0.92	0.88	0.90	0.94
Urgent care (1 day)	0.89	0.87	0.87	0.87

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Table D-2—Continued

Measure	Region			
	9		10	
	Civilian	Military	Civilian	Military
<i>Preventive care</i>				
Pregnant and did not smoke	0.90	0.76	0.89	0.43*
Know results of blood pressure check	0.94	0.89	0.95	0.94
Breast exam past year (age 40+)	0.62	0.79*	0.73	0.68
Did not chew tobacco past year (all ages)	0.99	0.99	0.96	0.98
Cholesterol test past 5 years	0.71	0.67	0.80	0.79
Dental care past year	0.67	0.60	0.71	0.61
Did not chew tobacco past year (age 18–24)	n/a	n/a	n/a	n/a
Flu shot (age 65+)	0.74	0.76	n/a	n/a
Mammogram past year (age 50+)	0.81	0.83	0.80	0.71
Ever had mammogram (age 40–49)	0.95	0.72*	0.98	0.61*
Mammogram past 2 years (age 50+)	0.92	0.89	0.94	0.87
PAP smear past 3 years	0.92	0.96	0.94	0.90
Ever had PAP test	0.98	0.99	0.98	1.00*
Physical exam past year	0.58	0.57	0.60	0.55
First trimester care	0.96	0.91	n/a	n/a
Prostate check (age 50+)	0.49	0.66	0.68	0.57
Prostate check (age 40+/B, 50+W)	0.49	0.66	0.68	0.61
Not smoke (age 18–24)	0.85	0.87	0.78	0.88
<i>Waiting time for an appointment</i>				
Minor care (days)	3.10	2.30	1.86	3.48*
Routine care (days)	11.82	11.60	12.88	10.60*
Urgent care (days)	0.64	0.67	0.57	0.54
Minor care (< 3 days)	0.82	0.86	0.93	0.67*
Routine care (< 30 days)	0.90	0.96	0.81	0.95*
Urgent care (1 day)	0.91	0.88	0.90	0.96

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Table D-2—Continued

Measure	Region			
	11		12	
	Civilian	Military	Civilian	Military
<i>Preventive care</i>				
Pregnant and did not smoke	—	—	0.67	0.83
Know results of blood pressure check	0.95	0.94	0.96	0.95
Breast exam past year (age 40+)	0.74	0.71	0.47	0.68
Did not chew tobacco past year (all ages)	0.98	0.99	0.88	1.00*
Cholesterol test past 5 years	0.80	0.80	0.82	0.65*
Dental care past year	0.73	0.60*	0.66	0.70
Did not chew tobacco past year (age 18–24)	—	—	—	—
Flu shot (age 65+)	0.70	0.85*	—	—
Mammogram past year (age 50+)	0.69	0.70	0.57	0.70
Ever had mammogram (age 40–49)	0.76	0.99*	—	—
Mammogram past 2 years (age 50+)	0.81	0.91	0.65	0.90*
PAP smear past 3 years	0.95	0.96	0.94	0.95
Ever had PAP test	0.99	0.98	—	—
Physical exam past year	0.57	0.55	0.59	0.55
First trimester care	—	—	—	—
Prostate check (age 50+)	0.60	0.55	0.75	0.65
Prostate check (age 40+/B, 50+/W)	0.62	0.55	0.73	0.65
Not smoke (age 18–24)	0.80	0.76	0.53	0.71
<i>Waiting time for an appointment</i>				
Minor care (days)	3.38	2.80	1.63	1.88
Routine care (days)	14.27	14.17	12.92	11.24
Urgent care (days)	0.61	0.64	0.56	0.58
Minor care (< 3 days)	0.78	0.78	0.87	0.86
Routine care (< 30 days)	0.86	0.91	0.99	0.93
Urgent care (1 day)	0.94	0.90	0.99	0.92*

## APPENDIX E: REGIONAL QUALITY-OF-CARE INDICATORS

Table E-1 shows quality-of-care measures for the 1998 population, broken down by TRICARE region, source of care, and military status. Items marked with an asterisk (\*) indicate a statistically significant difference between the level achieved and the goal. Entries of "n/a" indicate insufficient data for estimate.

**Table E-1. Quality-of-Care Measures**

<i>Pregnant did not smoke (Goal= .90)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	n/a	0.90	n/a	n/a	0.87
4	n/a	0.91	n/a	n/a	0.89
6	0.69*	0.91	n/a	n/a	0.86
7/8	0.78	0.92	n/a	n/a	0.90
9	n/a	0.94	n/a	n/a	0.91
10	n/a	n/a	n/a	n/a	0.88
11	n/a	0.84	n/a	n/a	0.88
12	n/a	0.85	n/a	n/a	0.86
<i>Know results of blood pressure check (Goal= .90)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.91*	0.93*	0.96*	0.96*	0.93*
4	0.92*	0.91*	0.95*	0.97*	0.92*
6	0.91*	0.92*	0.96*	0.95*	0.92*
7/8	0.91*	0.90*	0.97*	0.95*	0.91*
9	0.86*	0.89*	0.96*	0.96*	0.89*
10	0.89	0.93*	0.96*	0.97*	0.92*
11	0.90*	0.92*	0.97*	0.95*	0.92*
12	0.90*	0.93*	0.98*	0.88	0.91*
<i>Breast exam past year (age 40+) (Goal= .60)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	—	0.73*	0.76*	0.67	0.72*
4	—	0.63	0.70*	0.77*	0.66*
6	0.76*	0.68*	0.80*	0.74*	0.72*
7/8	—	0.71*	0.73*	0.81*	0.70*
9	—	0.71*	0.78*	0.69	0.71*
10	—	0.72*	0.71*	—	0.67*
11	—	0.69*	0.72*	0.62	0.66*
12	—	0.58	0.69	—	0.61

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**Table E-1—Continued**

<i>Did not chew tobacco past year (all ages) (Goal= .96)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.87*	0.98*	0.98*	0.96*	0.96*
4	0.88*	0.97*	0.98*	0.97*	0.96*
6	0.87*	0.96*	0.98*	0.99*	0.95*
7/8	0.86*	0.99*	0.99*	0.95*	0.95*
9	0.81*	0.99*	1.00*	1.00*	0.94*
10	0.92*	0.97*	1.00*	1.00*	0.98*
11	0.86*	0.98*	0.99*	0.98*	0.96*
12	0.82*	0.99*	1.00*	0.99*	0.91*
<i>Cholesterol test past 5 years (Goal= .75)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.75*	0.79*	0.93	0.91*	0.85*
4	0.77	0.78*	0.89*	0.86*	0.82*
6	0.77*	0.77*	0.91*	0.87*	0.82*
7/8	0.77*	0.74*	0.91*	0.86*	0.80*
9	0.67*	0.69*	0.92*	0.76	0.75*
10	0.70	0.80*	0.91*	0.88*	0.83*
11	0.75	0.79*	0.92*	0.77	0.81*
12	0.77	0.69*	0.90*	0.72	0.76
<i>Dental care past year (Goal= .70)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.86*	0.62*	0.69	0.67	0.70*
4	0.84*	0.58*	0.70	0.63	0.68*
6	0.84*	0.53*	0.58*	0.54*	0.60*
7/8	0.85*	0.63*	0.68	0.67	0.69*
9	0.83*	0.61*	0.73	0.62	0.70*
10	0.84*	0.64*	0.73	0.59*	0.68
11	0.88*	0.63*	0.67	0.61*	0.68*
12	0.88*	0.64*	0.75	0.65	0.76*
<i>Did not chew tobacco past year (age 17/8–24) (Goal= .96)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.81*	0.98*	—	0.97	0.90*
4	0.82*	0.98	—	—	0.91*
6	0.78*	0.87	—	0.91	0.84*
7/8	0.83*	0.96	—	0.97	0.89*
9	0.68*	1.00*	—	—	0.79*
10	0.91	0.97	—	—	0.95
11	0.80*	0.94	—	—	0.86*
12	0.66*	0.98	—	—	0.77*

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**Table E-1—Continued**

<i>Flu shot (age 65+)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	—	0.79	0.72	0.68	0.72
4	—	0.65	0.83	0.68	0.77
6	—	0.85	0.79	0.91	0.82
7/8	—	0.82	0.86	0.89	0.84
9	—	0.79	0.85	0.80	0.80
10	—	—	0.73	—	0.73
11	—	0.76	0.80	0.77	0.77
12	—	—	0.79	—	0.72

<i>Mammogram past year (age 50+) (Goal= .60)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	—	0.70*	0.75*	0.78*	0.73*
4	—	0.61	0.68	0.84*	0.68*
6	—	0.69*	0.76*	0.66	0.69*
7/8	—	0.74*	0.73*	0.84*	0.72*
9	—	0.77*	0.74*	0.72	0.71*
10	—	0.73*	0.75*	—	0.71*
11	—	0.66	0.71*	0.68	0.66
12	—	0.61	0.87*	—	0.73*

<i>Ever had mammogram (age 40–49) (Goal= .7/80)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	—	0.97*	0.98*	0.98*	0.94*
4	—	0.93*	0.88	0.95*	0.90*
6	0.98*	0.96*	0.97*	0.85	0.94*
7/8	—	0.84	0.98*	0.98*	0.89*
9	—	0.86	—	—	0.85
10	—	0.88	—	—	0.87
11	—	0.96*	—	—	0.95*
12	—	0.89	—	—	0.92*

<i>Mammogram past 2 years (age 50+) (Goal= .60)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	—	0.89*	0.93*	0.93*	0.91*
4	—	0.77*	0.88*	0.94*	0.85*
6	—	0.89*	0.87*	0.87*	0.87*
7/8	—	0.86*	0.84*	0.96*	0.84*
9	—	0.88*	0.89*	0.97*	0.87*
10	—	0.91*	0.92*	—	0.87*
11	—	0.84*	0.90*	0.88*	0.85*
12	—	0.82*	0.95*	—	0.86*

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**Table E-1—Continued**

<i>PAP smear past 3 years (Goal= .7/85)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.96*	0.93*	0.91*	0.90	0.91*
4	0.98*	0.91*	0.88	0.92*	0.88*
6	0.97*	0.91*	0.91*	0.89	0.90*
7/8	0.94*	0.92*	0.80	0.92*	0.86*
9	0.96*	0.93*	0.90*	0.95*	0.91*
10	0.98*	0.90*	0.88	0.90	0.87
11	0.97*	0.91*	0.85	0.90	0.88*
12	0.97*	0.92*	0.92	0.84	0.91*
<i>Ever had PAP test (Goal= .95)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	1.00*	0.98*	0.99*	0.99*	0.99*
4	0.99*	0.99*	0.99*	0.99*	0.99*
6	0.99*	0.99*	0.99*	0.99*	0.99*
7/8	0.95	0.99*	0.98*	1.00*	0.98*
9	1.00*	0.98*	0.98*	0.99*	0.98*
10	1.00	1.00*	0.98*	0.99*	0.98*
11	0.98	0.99*	1.00*	0.97*	0.99*
12	0.99*	1.00*	1.00*	1.00	1.00*
<i>Physical exam past year</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.42	0.58	0.67	0.67	0.58
4	0.50	0.53	0.62	0.56	0.55
6	0.47	0.54	0.68	0.50	0.55
7/8	0.49	0.53	0.72	0.58	0.57
9	0.44	0.56	0.70	0.59	0.54
10	0.44	0.56	0.60	0.68	0.55
11	0.48	0.53	0.62	0.56	0.53
12	0.45	0.55	0.63	0.58	0.51
<i>First trimester care (Goal= .90)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.88	0.90	—	—	0.91
4	—	0.96*	—	—	0.95*
6	0.91	0.94	—	—	0.92
7/8	0.94	0.90	—	—	0.90
9	0.97*	0.94	—	—	0.95*
10	—	—	—	—	0.93
11	—	0.83	—	—	0.87
12	—	0.91	—	—	0.93

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**Table E-1—Continued**

<i>Prostate check (age40+/B, 50+W)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.42*	0.65*	0.76*	0.79*	0.69*
4	0.56*	0.61*	0.74*	0.67*	0.66*
6	0.46*	0.63*	0.74*	0.82*	0.68*
7/8	0.46*	0.54*	0.69*	0.66*	0.61*
9	—	0.57*	0.77*	0.63*	0.64*
10	—	0.62*	0.63*	0.60*	0.58*
11	—	0.58*	0.69*	0.66*	0.60*
12	—	0.70*	0.55*	—	0.56*
<i>Not smoke (age 17/8–24) (Goal= .7/80)</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.75	0.77	—	0.82	0.77
4	0.73	0.77	—	—	0.78
6	0.70*	0.78	—	0.88	0.75
7/8	0.74*	0.74	—	0.76	0.73*
9	0.70*	0.93*	—	—	0.78
10	0.71	0.73	—	—	0.79
11	0.71*	0.75	—	—	0.72*
12	0.70	0.65	—	—	0.70*

Note: Measures are proportions unless otherwise indicated. Entries marked “—” indicate insufficient sample size for estimation.

## APPENDIX F: REGIONAL DIFFERENCES IN SATISFACTION WITH CLAIMS PROCESSING

Table F-1 shows survey respondent's claims filing experiences by region, source of care and military status.

**Table F-1. Regional Claims Filing**

<i>Filed a claim</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.35	0.35	0.34	0.31	0.32
4	0.36	0.34	0.34	0.35	0.33
6	0.35	0.34	0.36	0.36	0.34
7/8	0.35	0.36	0.35	0.28	0.32
9	0.25	0.30	0.25	0.29	0.26
10	0.36	0.32	0.26	0.27	0.27
11	0.30	0.35	0.33	0.43	0.33
12	0.28	0.31	0.25	0.36	0.29
<i>Had some problem with a claim</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.62	0.55	0.49	0.61	0.55
4	0.66	0.59	0.57	0.49	0.58
6	0.63	0.65	0.48	0.53	0.57
7/8	0.69	0.53	0.52	0.67	0.58
9	0.54	0.51	0.42	0.48	0.49
10	0.57	0.52	0.45	0.78	0.54
11	0.56	0.56	0.40	0.59	0.51
12	0.55	0.43	0.26	n/a	0.46
<i>Had a BIG problem with a claim</i>					
Region	AD (All)	Non-AD (Prime)	Non-AD (Civilian)	Non-AD (Other Nonenrolled)	Total
3	0.24	0.17	0.22	0.22	0.21
4	0.29	0.21	0.15	0.18	0.20
6	0.25	0.26	0.09	0.20	0.19
7/8	0.28	0.24	0.11	0.13	0.19
9	0.18	0.17	0.12	0.17	0.16
10	0.27	0.20	0.10	0.25	0.18
11	0.21	0.18	0.10	0.21	0.16
12	0.22	0.11	0.05	n/a	0.15

## APPENDIX G. RETIREE ACCESS AND QUALITY OF CARE MEASURES

Regional changes in access and quality of care measures for retirees from 1994 to 1998 are shown in Table G-1. Military retirees and their families' perceptions about TRICARE in 1998 are compared to those of Active Duty and their family members as well as those in comparable civilian health care plans in Table G-2.

**Table G-1. Changes in Retiree Access and Quality of Care Measures (1994–1998)**

Measure	Region	Source of Care							
		Prime		Civilian		Other Nonenrolled		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Appointment gap (days)	3	16.01	8.47*	8.30	7.85	15.16	10.34*	11.24	8.18*
	4	12.47	7.75*	6.87	7.60	13.97	8.52*	9.75	7.69*
	6	19.00	8.49*	5.71	7.17*	20.62	8.54*	12.39	7.68*
	7/8	11.60	8.78*	7.33	7.87	15.40	7.79*	10.69	8.14*
	9	11.15	7.74*	7.46	7.62	11.02	6.45*	8.79	7.49*
	10	8.15	8.92	9.49	7.95*	16.09	7.51*	10.64	8.16*
	11	16.31	8.83*	7.26	8.68*	15.16	8.35*	10.54	8.70*
	12	8.93	7.85	6.44	6.13	—	—	9.70	6.92
	Total	13.92	8.38*	7.37	7.77*	16.00	8.29*	10.83	7.98*
BP check past year	3	0.83	0.92*	0.90	0.96*	0.92	0.98*	0.84	0.93*
	4	0.81	0.91*	0.89	0.96*	0.91	0.98*	0.81	0.92*
	6	0.79	0.94*	0.91	0.97*	0.92	0.98*	0.83	0.93*
	7/8	0.73	0.91*	0.91	0.94	0.90	0.95	0.82	0.89*
	9	0.81	0.90*	0.93	0.97*	0.90	0.95	0.85	0.90*
	10	0.85	0.92*	0.93	0.96	0.90	0.98*	0.86	0.91*
	11	0.77	0.92*	0.91	0.94	0.91	0.96	0.82	0.90*
	12	0.83	0.92*	0.93	0.96	0.90	0.88	0.82	0.89
	Total	0.81	0.92*	0.91	0.96*	0.91	0.97*	0.83	0.91*
Cholesterol check past year	3	0.57	0.62	0.74	0.73	0.70	0.73	0.62	0.68
	4	0.62	0.57	0.71	0.62*	0.65	0.65	0.59	0.59
	6	0.58	0.65	0.64	0.66	0.67	0.68	0.58	0.63
	7/8	0.51	0.54	0.65	0.69	0.68	0.59	0.58	0.59
	9	0.67	0.58*	0.78	0.73	0.61	0.56	0.66	0.61*
	10	0.66	0.62	0.73	0.66	0.67	0.74	0.65	0.62
	11	0.49	0.54	0.67	0.62	0.60	0.58	0.57	0.56
	12	0.62	0.61	0.74	0.69	0.59	0.66	0.64	0.62
	Total	0.59	0.60	0.70	0.68*	0.67	0.66	0.61	0.62*

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Table G-1—Continued

Measure	Region	Source of Care							
		Prime		Civilian		Other Nonenrolled		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Interpersonal concern of providers	3	0.69	0.90*	0.83	0.95*	0.68	0.93*	0.77	0.93*
	4	0.70	0.93*	0.82	0.95*	0.72	0.90*	0.76	0.94*
	6	0.73	0.91*	0.89	0.96*	0.64	0.81*	0.80	0.93*
	7/8	0.69	0.92*	0.86	0.96*	0.68	0.88*	0.77	0.94*
	9	0.72	0.93*	0.87	0.95*	0.71	0.84	0.81	0.93*
	10	0.76	0.94*	0.88	0.97*	0.67	0.91*	0.83	0.96*
	11	0.79	0.95*	0.88	0.95*	0.62	0.87*	0.81	0.94*
	12	0.79	0.91*	0.94	0.99*	—	—	0.86	0.94*
	Total	0.72	0.92*	0.85	0.95*	0.67	0.87*	0.79	0.94*
Dental care past year	3	0.25	0.60*	0.69	0.68	0.40	0.68*	0.52	0.65*
	4	0.32	0.52*	0.68	0.72	0.43	0.62*	0.52	0.64*
	6	0.31	0.49*	0.64	0.58	0.38	0.53*	0.47	0.52*
	7/8	0.33	0.59*	0.66	0.70	0.36	0.69*	0.49	0.64*
	9	0.37	0.56*	0.77	0.74	0.47	0.55	0.61	0.64*
	10	0.45	0.61*	0.75	0.74	0.41	0.57*	0.58	0.67*
	11	0.30	0.60*	0.68	0.67	0.36	0.59*	0.53	0.62*
	12	0.40	0.55*	0.74	0.78	0.44	0.65*	0.55	0.66*
	Total	0.33	0.56*	0.68	0.68	0.39	0.60*	0.52	0.62*
Satisfied with convenience of treatment location	3	0.74	0.84*	0.90	0.95*	0.72	0.75	0.83	0.89*
	4	0.81	0.87	0.90	0.93	0.76	0.74	0.85	0.89
	6	0.77	0.89*	0.91	0.94	0.68	0.72	0.83	0.89*
	7/8	0.84	0.85	0.90	0.90	0.71	0.71	0.83	0.87
	9	0.86	0.88	0.94	0.95	0.79	0.83	0.89	0.90
	10	0.80	0.85	0.93	0.97*	0.51	0.60	0.83	0.90*
	11	0.87	0.87	0.88	0.91	0.73	0.79	0.85	0.88
	12	0.88	0.90	0.97	0.97			0.90	0.92
	Total	0.81	0.87*	0.91	0.94*	0.71	0.75	0.84	0.89*
Satisfied with time spent with provider	3	0.78	0.83	0.85	0.91*	0.77	0.89*	0.82	0.89*
	4	0.69	0.87*	0.85	0.87	0.78	0.90*	0.80	0.87*
	6	0.74	0.87*	0.92	0.90	0.70	0.75	0.83	0.88*
	7/8	0.74	0.85*	0.89	0.92	0.75	0.87*	0.83	0.90*
	9	0.81	0.89*	0.89	0.89	0.74	0.71	0.85	0.86
	10	0.80	0.90*	0.89	0.94	0.69	0.82	0.84	0.92*
	11	0.85	0.91	0.90	0.93	0.72	0.74	0.85	0.91
	12	0.85	0.90	0.96	0.99*			0.90	0.95*
	Total	0.77	0.86*	0.88	0.91*	0.74	0.81*	0.82	0.89*

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Table G-1—Continued

Measure	Region	Source of Care						Total	
		Prime		Civilian		Other Nonenrolled		FY94	FY98
		FY94	FY98	FY94	FY98	FY94	FY98		
Satisfied with convenience of hours	3	0.82	0.89*	0.93	0.97*	0.77	0.86*	0.88	0.93*
	4	0.86	0.92*	0.93	0.94	0.82	0.86	0.88	0.92*
	6	0.82	0.90*	0.92	0.97*	0.74	0.81	0.87	0.93*
	7/8	0.83	0.87	0.95	0.97	0.79	0.92*	0.88	0.94*
	9	0.90	0.93	0.96	0.96	0.84	0.86	0.92	0.93
	10	0.90	0.90	0.96	0.96	0.79	0.84	0.92	0.93
	11	0.93	0.94	0.94	0.99*	0.78	0.83	0.90	0.95*
	12	0.78	0.90*	0.99	0.98			0.91	0.94
	Total	0.85	0.90*	0.94	0.97*	0.79	0.85*	0.89	0.93*
Satisfied with access to care if needed	3	0.67	0.84*	0.89	0.94*	0.57	0.55	0.78	0.86*
	4	0.65	0.81*	0.92	0.94	0.56	0.46	0.79	0.85*
	6	0.58	0.82*	0.91	0.94	0.57	0.54	0.76	0.84*
	7/8	0.69	0.86*	0.91	0.95	0.61	0.65	0.79	0.89*
	9	0.82	0.88	0.94	0.96	0.77	0.75	0.88	0.90
	10	0.79	0.80	0.92	0.93	0.58	0.63	0.83	0.87
	11	0.76	0.85*	0.94	0.96	0.59	0.61	0.83	0.89
	12	0.75	0.84	0.98	1.00			0.86	0.87
	Total	0.70	0.84*	0.91	0.94*	0.60	0.59	0.80	0.86*
Satisfied with access to specialist	3	0.59	0.81*	0.87	0.95*	0.44	0.52	0.73	0.86*
	4	0.56	0.76*	0.90	0.93	0.47	0.52	0.74	0.84*
	6	0.52	0.79*	0.91	0.91	0.47	0.51	0.73	0.81*
	7/8	0.66	0.82*	0.87	0.94*	0.54	0.59	0.75	0.87*
	9	0.75	0.79	0.92	0.92	0.59	0.62	0.82	0.83
	10	0.68	0.79*	0.93	0.94	0.51	0.63	0.80	0.87*
	11	0.69	0.79*	0.93	0.94	0.58	0.65	0.81	0.87
	12	0.75	0.74	0.95	0.99*			0.82	0.84*
	Total	0.62	0.79*	0.90	0.93*	0.50	0.55	0.75	0.85*
Satisfied with access to hospital care	3	0.79	0.89*	0.93	0.97*	0.62	0.67	0.84	0.91*
	4	0.73	0.86*	0.94	0.96	0.68	0.53*	0.85	0.89*
	6	0.71	0.87*	0.96	0.95	0.72	0.72	0.86	0.89*
	7/8	0.82	0.90*	0.95	0.97	0.75	0.74	0.88	0.93*
	9	0.85	0.91	0.97	0.95	0.75	0.82	0.89	0.92
	10	0.81	0.81	0.96	0.94	0.60	0.65	0.87	0.88
	11	0.87	0.93	0.97	0.99	0.67	0.63	0.89	0.93
	12	0.90	0.87	0.97	0.98			0.91	0.91
	Total	0.79	0.88*	0.95	0.96	0.69	0.69	0.86	0.91*

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**Table G-1—Continued**

Measure	Region	Source of Care							
		Prime		Civilian		Other Nonenrolled		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Satisfied with access to emergency care	3	0.78	0.83	0.92	0.96*	0.65	0.75	0.84	0.90*
	4	0.77	0.85*	0.92	0.94	0.72	0.52*	0.84	0.87*
	6	0.70	0.83*	0.92	0.94	0.67	0.71	0.82	0.88
	7/8	0.85	0.83	0.85	0.96*	0.70	0.73	0.83	0.89*
	9	0.83	0.88	0.94	0.93	0.78	0.71	0.88	0.88
	10	0.84	0.81	0.93	0.95	0.62	0.74	0.86	0.89
	11	0.84	0.88	0.93	0.96	0.73	0.74	0.88	0.91
	12	0.85	0.89	0.96	0.97			0.88	0.91
	Total	0.79	0.84*	0.92	0.95*	0.70	0.70	0.84	0.89*
Satisfied with ease of making an appointment	3	0.59	0.80*	0.92	0.96*	0.50	0.64*	0.76	0.87*
	4	0.52	0.82*	0.94	0.98*	0.49	0.50	0.76	0.87*
	6	0.47	0.78*	0.94	0.98*	0.39	0.56*	0.71	0.86*
	7/8	0.64	0.86*	0.96	0.96	0.48	0.63*	0.77	0.89*
	9	0.79	0.89*	0.96	0.95	0.72	0.72	0.88	0.89
	10	0.83	0.84	0.92	0.96	0.60	0.74	0.84	0.90
	11	0.59	0.84*	0.97	0.97	0.45	0.55	0.79	0.88*
	12	0.74	0.82	0.99	1.00			0.80	0.85
	Total	0.62	0.82*	0.94	0.96*	0.48	0.60*	0.77	0.87*
Satisfied with waiting time to see provider	3	0.68	0.75	0.83	0.86	0.56	0.64	0.73	0.80
	4	0.63	0.77*	0.84	0.78*	0.61	0.55	0.74	0.74
	6	0.62	0.78*	0.84	0.85	0.58	0.67	0.72	0.80*
	7/8	0.63	0.82*	0.83	0.87	0.65	0.79*	0.74	0.84*
	9	0.71	0.81*	0.88	0.89	0.65	0.66	0.81	0.83
	10	0.76	0.78	0.89	0.88	0.65	0.85*	0.81	0.85
	11	0.71	0.83*	0.90	0.92	0.63	0.70	0.80	0.87*
	12	0.76	0.77	0.93	0.95			0.81	0.84
	Total	0.67	0.78*	0.85	0.85	0.61	0.67*	0.75	0.81*
Satisfied with appointment gap	3	0.59	0.77*	0.88	0.92*	0.51	0.63*	0.75	0.84*
	4	0.62	0.76*	0.90	0.89	0.55	0.49	0.78	0.81*
	6	0.53	0.77*	0.91	0.91	0.46	0.60*	0.72	0.82*
	7/8	0.64	0.84*	0.91	0.91	0.51	0.71*	0.74	0.86*
	9	0.74	0.81	0.91	0.90	0.72	0.71	0.85	0.84
	10	0.79	0.77	0.90	0.91	0.62	0.70	0.82	0.85
	11	0.73	0.80	0.90	0.92	0.58	0.64	0.79	0.86
	12	0.78	0.80	0.97	0.99*			0.83	0.88
	Total	0.64	0.79*	0.90	0.91	0.53	0.63*	0.76	0.84*

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**Table G-1—Continued**

Measure	Region	Source of Care							
		Prime		Civilian		Other Nonenrolled		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Satisfied with availability of health care information by phone	3	0.51	0.77*	0.78	0.90*	0.44	0.58*	0.67	0.82*
	4	0.49	0.77*	0.80	0.85	0.46	0.51	0.68	0.78*
	6	0.60	0.74*	0.85	0.87	0.39	0.49	0.69	0.78*
	7/8	0.53	0.81*	0.84	0.89	0.51	0.68*	0.69	0.84*
	9	0.69	0.77	0.84	0.90*	0.54	0.68	0.76	0.83*
	10	0.73	0.73	0.85	0.90	0.48	0.60	0.77	0.83
	11	0.65	0.82*	0.86	0.88	0.51	0.56	0.75	0.83*
	12	0.67	0.76	0.92	0.98*			0.76	0.86*
	Total	0.58	0.77*	0.82	0.88*	0.45	0.56*	0.69	0.81*
Satisfied with availability of prescription services	3	0.89	0.88	0.92	0.92	0.85	0.86	0.89	0.90
	4	0.88	0.90	0.93	0.90	0.86	0.88	0.89	0.90
	6	0.85	0.86	0.90	0.92	0.83	0.86	0.87	0.89
	7/8	0.82	0.87	0.96	0.96	0.86	0.91	0.91	0.93
	9	0.85	0.91	0.95	0.94	0.85	0.93*	0.92	0.93
	10	0.87	0.85	0.94	0.95	0.82	0.95*	0.90	0.92
	11	0.89	0.90	0.96	0.94	0.76	0.85	0.90	0.92
	12	0.81	0.92*	0.95	0.97			0.92	0.95*
	Total	0.86	0.88*	0.93	0.93	0.83	0.89*	0.89	0.91*
Satisfied with thoroughness of exam	3	0.80	0.88*	0.89	0.95*	0.74	0.91*	0.84	0.92*
	4	0.79	0.88*	0.91	0.95*	0.81	0.83	0.86	0.92*
	6	0.74	0.88*	0.95	0.93	0.75	0.82	0.87	0.90*
	7/8	0.78	0.86*	0.93	0.98*	0.76	0.81	0.87	0.93*
	9	0.80	0.90*	0.92	0.93	0.80	0.85	0.88	0.91*
	10	0.83	0.87	0.94	0.93	0.85	0.88	0.90	0.91
	11	0.91	0.92	0.92	0.95	0.79	0.89	0.89	0.94
	12	0.77	0.88*	0.98	1.00			0.88	0.90*
	Total	0.80	0.88*	0.92	0.95*	0.77	0.85*	0.86	0.91*
Satisfied with ability to diagnose	3	0.73	0.86*	0.90	0.95*	0.77	0.90*	0.84	0.92*
	4	0.76	0.84*	0.90	0.93	0.79	0.83	0.86	0.90*
	6	0.79	0.87*	0.91	0.94	0.75	0.83	0.85	0.90*
	7/8	0.80	0.83	0.90	0.90	0.76	0.86*	0.85	0.88
	9	0.87	0.90	0.94	0.95	0.81	0.85	0.91	0.92
	10	0.85	0.92*	0.93	0.97*	0.82	0.88	0.90	0.95*
	11	0.89	0.88	0.88	0.91	0.80	0.87	0.86	0.90
	12	0.83	0.87	0.97	0.97			0.88	0.89
	Total	0.80	0.87*	0.91	0.94*	0.77	0.85*	0.86	0.90*

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**Table G-1—Continued**

Measure	Region	Source of Care							
		Prime		Civilian		Other Nonenrolled		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Satisfied with skill of provider	3	0.82	0.90*	0.93	0.97*	0.82	0.92*	0.88	0.94*
	4	0.84	0.89	0.93	0.94	0.85	0.91*	0.89	0.93*
	6	0.86	0.92*	0.92	0.97*	0.83	0.88	0.89	0.94*
	7/8	0.80	0.87	0.95	0.97	0.83	0.94*	0.90	0.94*
	9	0.89	0.93	0.96	0.96	0.83	0.92	0.92	0.94
	10	0.90	0.93	0.96	0.96	0.90	0.85	0.94	0.94
	11	0.94	0.94	0.94	0.99*	0.83	0.87	0.91	0.96*
	12	0.77	0.91*	0.99	0.98			0.91	0.93*
	Total	0.86	0.91*	0.94	0.97*	0.83	0.90*	0.90	0.94*
Satisfied with thoroughness of treatment	3	0.85	0.88	0.89	0.96*	0.78	0.91*	0.85	0.94*
	4	0.80	0.86	0.93	0.97*	0.79	0.86	0.87	0.93*
	6	0.80	0.89*	0.96	0.97	0.77	0.79	0.88	0.92*
	7/8	0.82	0.88	0.91	0.96*	0.82	0.86	0.88	0.93*
	9	0.84	0.90	0.94	0.92	0.86	0.89	0.91	0.91
	10	0.86	0.91	0.95	0.95	0.86	0.89	0.91	0.93
	11	0.95	0.91*	0.96	0.96	0.79	0.87	0.91	0.94
	12	0.87	0.90	0.98	0.99			0.90	0.91
	Total	0.84	0.89*	0.93	0.96*	0.80	0.86*	0.88	0.93*
Satisfied with outcome of health care	3	0.85	0.87	0.89	0.96*	0.82	0.91*	0.86	0.93*
	4	0.84	0.87	0.92	0.95	0.81	0.90*	0.87	0.92*
	6	0.80	0.90*	0.96	0.95	0.80	0.82	0.88	0.91*
	7/8	0.81	0.88*	0.92	0.97*	0.79	0.86	0.87	0.93*
	9	0.85	0.89	0.94	0.94	0.86	0.89	0.91	0.92
	10	0.84	0.89	0.93	0.95	0.86	0.88	0.90	0.92
	11	0.92	0.92	0.93	0.95	0.81	0.79	0.89	0.92
	12	0.83	0.90	0.97	0.99*			0.90	0.91
	Total	0.84	0.88*	0.92	0.95*	0.80	0.86*	0.88	0.92*
Satisfied with overall quality of care	3	0.85	0.88	0.90	0.97*	0.79	0.88*	0.86	0.93*
	4	0.79	0.89*	0.94	0.97*	0.80	0.83	0.87	0.94*
	6	0.74	0.91*	0.95	0.97	0.76	0.75	0.87	0.92*
	7/8	0.85	0.89	0.94	0.97*	0.81	0.84	0.89	0.93*
	9	0.86	0.94*	0.95	0.97	0.86	0.92	0.92	0.95*
	10	0.87	0.91	0.95	0.95	0.86	0.78	0.91	0.92
	11	0.92	0.93	0.94	0.97	0.81	0.81	0.90	0.94
	12	0.89	0.91	0.98	0.99			0.91	0.92
	Total	0.83	0.90*	0.94	0.97*	0.80	0.83	0.88	0.93*

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Table G-1—Continued

Measure	Region	Source of Care							
		Prime		Civilian		Other Nonenrolled		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Satisfied with explanation of procedures	3	0.80	0.86	0.87	0.96*	0.77	0.84	0.84	0.92*
	4	0.79	0.89*	0.91	0.94	0.82	0.83	0.86	0.91*
	6	0.79	0.87*	0.94	0.95	0.78	0.77	0.88	0.90
	7/8	0.80	0.84	0.92	0.96*	0.76	0.82	0.85	0.91
	9	0.84	0.92*	0.93	0.95	0.86	0.86	0.90	0.93*
	10	0.86	0.88	0.92	0.93	0.87	0.89	0.90	0.91
	11	0.95	0.92	0.94	0.96	0.77	0.77	0.90	0.92
	12	0.80	0.89	0.96	0.99*			0.90	0.91
	Total	0.82	0.88*	0.91	0.95*	0.79	0.81	0.87	0.91*
Satisfied with explanation of medical tests	3	0.81	0.86	0.87	0.94*	0.79	0.88*	0.84	0.91*
	4	0.76	0.86*	0.90	0.91	0.83	0.87	0.85	0.89*
	6	0.78	0.87*	0.94	0.93	0.78	0.79	0.87	0.89
	7/8	0.79	0.87*	0.93	0.96	0.78	0.83	0.86	0.92
	9	0.85	0.90	0.92	0.94	0.84	0.83	0.89	0.91
	10	0.83	0.87	0.91	0.93	0.88	0.89	0.89	0.91
	11	0.93	0.93	0.92	0.94	0.78	0.79	0.89	0.92
	12	0.86	0.87	0.96	0.99*			0.90	0.90
	Total	0.81	0.88*	0.91	0.94*	0.79	0.83	0.86	0.91*
Satisfied with attention by provider	3	0.79	0.88*	0.87	0.95*	0.78	0.89*	0.84	0.93*
	4	0.82	0.89*	0.87	0.94*	0.82	0.89*	0.84	0.93*
	6	0.78	0.90*	0.92	0.98*	0.73	0.86	0.85	0.94*
	7/8	0.75	0.91*	0.91	0.94	0.76	0.90*	0.84	0.93*
	9	0.84	0.92*	0.91	0.94	0.82	0.85	0.88	0.92*
	10	0.86	0.95*	0.92	0.94	0.79	0.87	0.89	0.94*
	11	0.92	0.95	0.92	0.94	0.76	0.90*	0.89	0.94*
	12	0.88	0.92	0.95	0.98			0.91	0.94
	Total	0.81	0.90*	0.90	0.95*	0.77	0.87*	0.85	0.93*
Satisfied with admin staff courtesy	3	0.82	0.94*	0.92	0.97*	0.79	0.96*	0.87	0.96*
	4	0.83	0.96*	0.90	0.99*	0.84	0.97*	0.86	0.98*
	6	0.84	0.95*	0.94	0.99*	0.77	0.96*	0.88	0.98*
	7/8	0.75	0.95*	0.92	0.99*	0.81	0.95*	0.86	0.98*
	9	0.87	0.96*	0.95	0.99*	0.81	0.89	0.91	0.97*
	10	0.88	0.96*	0.95	0.99*	—	—	0.91	0.98*
	11	0.84	0.97*	0.97	0.98	0.74	0.99*	0.90	0.98*
	12	0.81	0.92	0.98	1.00	—	—	0.89	0.95*
	Total	0.84	0.95*	0.94	0.98*	0.79	0.95*	0.88	0.97*

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Table G-1—Continued

Measure	Region	Source of Care							
		Prime		Civilian		Other Nonenrolled		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Flu shot past year	3	0.26	0.39*	0.46	0.56*	0.41	0.52*	0.37	0.49*
	4	0.29	0.38*	0.43	0.58*	0.43	0.56*	0.37	0.51*
	6	0.45	0.51	0.47	0.57*	0.45	0.58*	0.43	0.54*
	7/8	0.41	0.48	0.48	0.65*	0.55	0.63	0.44	0.57*
	9	0.33	0.48*	0.54	0.68*	0.48	0.54	0.45	0.57*
	10	0.35	0.43	0.54	0.58	0.57	0.52	0.47	0.52
	11	0.40	0.53*	0.49	0.62*	0.44	0.58*	0.43	0.57*
	12	0.29	0.40	0.59	0.63	0.54	0.63	0.47	0.53
	Total	0.35	0.45*	0.48	0.60*	0.47	0.56*	0.42	0.53*
Mammogram past year (40+)	3	0.70	0.71	0.74	0.77	0.70	0.72	0.68	0.73
	4	0.64	0.61	0.72	0.67	0.68	0.76	0.65	0.65
	6	0.50	0.67*	0.68	0.72	0.53	0.65	0.58	0.67*
	7/8	0.71	0.69	0.73	0.69	0.77	0.83	0.67	0.69
	9	0.77	0.71	0.73	0.71	0.76	0.66	0.70	0.67
	10	0.78	0.70	0.74	0.72	—	—	0.72	0.68
	11	0.58	0.61	0.71	0.69	0.74	0.56*	0.65	0.62
	12	—	—	0.50	0.78*	—	—	0.55	0.66*
	Total	0.66	0.67	0.72	0.72	0.70	0.71	0.66	0.68*
Mammogram past year (50+)	3	0.76	0.72	0.76	0.77	0.74	0.80	0.70	0.74
	4	0.62	0.61	0.74	0.69	0.74	0.81	0.68	0.68
	6	0.44	0.71*	0.68	0.78	0.62	0.70	0.59	0.72*
	7/8	0.74	0.74	0.75	0.75	0.75	0.84	0.70	0.72
	9	0.79	0.78	0.75	0.73	0.72	0.69	0.72	0.71
	10	0.83	0.76	0.78	0.76	—	—	0.76	0.72
	11	0.62	0.64	0.70	0.72	0.81	0.66*	0.68	0.65
	12	—	—	0.40	0.85*	—	—	0.56	0.74*
	Total	0.68	0.70*	0.74	0.75	0.73	0.75	0.68	0.71*
PAP test past year	3	0.68	0.65	0.69	0.66	0.71	0.68	0.66	0.64
	4	0.65	0.67	0.70	0.59*	0.72	0.67	0.64	0.60
	6	0.68	0.64	0.67	0.70	0.64	0.63	0.64	0.64
	7/8	0.79	0.70*	0.67	0.60	0.72	0.69	0.64	0.62
	9	0.73	0.70	0.70	0.67	0.77	0.60*	0.68	0.63
	10	0.72	0.66	0.71	0.59*	—	—	0.67	0.58*
	11	0.69	0.58	0.74	0.59*	0.73	0.60	0.68	0.57*
	12	—	—	0.58	0.68	—	—	0.62	0.59
	Total	0.70	0.65	0.69	0.63*	0.72	0.65	0.65	0.62*

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Table G-1—Continued

Measure	Region	Source of Care							
		Prime		Civilian		Other Nonenrolled		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Physical exam past year	3	0.43	0.59*	0.71	0.68	0.61	0.71*	0.57	0.63*
	4	0.47	0.56*	0.68	0.61	0.58	0.56	0.55	0.56
	6	0.49	0.58	0.67	0.69	0.56	0.50	0.56	0.59
	7/8	0.44	0.54*	0.72	0.73	0.60	0.61	0.58	0.61
	9	0.60	0.60	0.72	0.68	0.57	0.67	0.62	0.61
	10	0.64	0.59	0.70	0.61*	0.62	0.67	0.61	0.58
	11	0.42	0.50	0.73	0.63*	0.55	0.57	0.58	0.55*
	12	0.47	0.55	0.71	0.65	0.47	0.60	0.56	0.57
	Total	0.50	0.57*	0.70	0.67*	0.57	0.61	0.58	0.59*
Prostate check past year	3	0.48	0.66*	0.69	0.78	0.72	0.79	0.59	0.71*
	4	0.61	0.61	0.71	0.74	0.70	0.67	0.60	0.66
	6	0.57	0.65	0.72	0.74	0.74	0.80	0.62	0.69
	7/8	0.52	0.56	0.76	0.70	0.77	0.64*	0.67	0.61
	9	0.64	0.57	0.75	0.77	0.69	0.63	0.66	0.65
	10	0.74	0.62	0.81	0.65*	0.75	0.60	0.72	0.59*
	11	0.52	0.57	0.72	0.69	0.65	0.65	0.62	0.62
	12	—	—	0.77	0.57*	—	—	0.58	0.56
	Total	0.58	0.61*	0.74	0.73	0.71	0.71	0.64	0.66*
Fewer than 3 calls to get appointment	3	0.62	0.90*	0.75	0.98*	0.56	0.82*	0.69	0.94*
	4	0.47	0.86*	0.77	0.97*	0.55	0.78*	0.68	0.94*
	6	0.59	0.84*	0.75	0.97*	0.39	0.80*	0.62	0.91*
	7/8	0.63	0.93*	0.76	0.97*	0.56	0.76*	0.68	0.95*
	9	0.66	0.89*	0.76	0.98*	0.67	0.89*	0.73	0.94*
	10	0.69	0.88*	0.75	0.95*	0.62	0.93*	0.70	0.93*
	11	0.56	0.91*	0.80	0.97*	0.55	0.73*	0.71	0.93*
	12	0.70	0.88*	0.79	0.98*	—	—	0.67	0.92*
	Total	0.60	0.88*	0.76	0.97*	0.52	0.82*	0.68	0.93*
Used ER past year	3	0.47	0.33*	0.34	0.23*	0.49	0.35*	0.39	0.28*
	4	0.51	0.29*	0.32	0.17*	0.48	0.41	0.39	0.25*
	6	0.39	0.36	0.29	0.25	0.47	0.43	0.36	0.32
	7/8	0.57	0.30*	0.30	0.21*	0.52	0.31*	0.40	0.25*
	9	0.40	0.29*	0.34	0.25*	0.41	0.25*	0.36	0.26*
	10	0.24	0.25	0.34	0.27	0.45	0.40	0.35	0.28
	11	0.49	0.31*	0.35	0.20*	0.48	0.30*	0.41	0.25*
	12	0.39	0.28	0.32	0.18*	0.52	0.47	0.42	0.27*
	Total	0.43	0.31*	0.32	0.22*	0.48	0.36*	0.38	0.28*

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**Table G-1—Continued**

Measure	Region	Source of Care							
		Prime		Civilian		Other Nonenrolled		Total	
		FY94	FY98	FY94	FY98	FY94	FY98	FY94	FY98
Visited health care provider	3	0.92	0.88*	0.94	0.86*	0.83	0.97*	0.90	0.89*
	4	0.92	0.91	0.96	0.85*	0.83	0.96*	0.92	0.88*
	6	0.94	0.93	0.94	0.81*	0.81	0.97*	0.89	0.87
	7/8	0.94	0.93	0.95	0.79*	0.88	0.98*	0.91	0.86*
	9	0.93	0.91	0.94	0.85*	0.80	0.99*	0.90	0.90
	10	0.87	0.91	0.93	0.82*	0.84	0.97*	0.88	0.87*
	11	0.89	0.94	0.93	0.83*	0.79	0.97*	0.88	0.88
	12	0.95	0.93	0.95	0.74*	0.89	0.94	0.91	0.84*
Total	0.92	0.91	0.94	0.83*	0.83	0.97*	0.90	0.88*	
Waited less than 30 minutes in provider office	3	0.67	0.78*	0.83	0.80	0.67	0.73	0.77	0.79*
	4	0.73	0.81	0.81	0.78	0.72	0.75	0.77	0.78
	6	0.75	0.79	0.86	0.81	0.63	0.82*	0.78	0.81*
	7/8	0.76	0.87*	0.88	0.86	0.81	0.93*	0.84	0.87*
	9	0.80	0.86	0.91	0.90	0.68	0.75	0.86	0.87
	10	0.87	0.81	0.95	0.90*	0.68	0.81	0.89	0.87
	11	0.80	0.89*	0.94	0.92	0.69	0.81	0.87	0.90*
	12	0.81	0.87	0.94	0.95	—	—	0.83	0.89
Total	0.77	0.82*	0.87	0.84	0.70	0.79*	0.81	0.83*	

\* Indicates statistically significant change from 1994 ( $p < 0.05$ ).

**Table G-2. Comparison Of Retiree Perceptions With Other Populations**

Measure	Source of Care	Military Status/Health Care System <sup>1</sup>			
		Retirees		AD, ADFM	
		MHS	NCBD	MHS	NCBD
Doctor explained things clearly	Military PCM	0.94	0.95*	0.90	0.92
	Civilian PCM	0.94	0.95*	0.90	0.91
	Civilian Care Only	0.96	0.97	0.96	0.96
	Other Nonenrolled	0.93	0.96*	0.86	0.91
	Total	0.95	0.95	0.90	0.90
Doctor listens carefully	Military PCM	0.90	0.93*	0.83	0.87*
	Civilian PCM	0.90	0.93*	0.81	0.86*
	Civilian Care Only	0.95	0.97	0.92	0.95*
	Other Nonenrolled	0.89	0.95*	0.79	0.89*
	Total	0.93	0.94	0.83	0.85
Doctor respected comments	Military PCM	0.92	0.94*	0.85	0.88
	Civilian PCM	0.93	0.94	0.84	0.87
	Civilian Care Only	0.95	0.97*	0.92	0.95*
	Other Nonenrolled	0.93	0.95*	0.82	0.86
	Total	0.94	0.95*	0.86	0.87
Doctor spent enough time	Military PCM	0.85	0.89*	0.78	0.83*
	Civilian PCM	0.88	0.89*	0.77	0.80
	Civilian Care Only	0.91	0.94	0.87	0.91*
	Other Nonenrolled	0.85	0.91*	0.78	0.86*
	Total	0.88	0.91*	0.78	0.82*
Doctor's staff courteous and respectful	Military PCM	0.95	0.96*	0.87	0.88
	Civilian PCM	0.95	0.96*	0.86	0.89*
	Civilian Care Only	0.98	0.98	0.93	0.93
	Other Nonenrolled	0.97	0.96*	0.85	0.84
	Total	0.97	0.96*	0.88	0.81*
Doctor's staff helpful	Military PCM	0.91	0.92*	0.80	0.82
	Civilian PCM	0.92	0.92	0.78	0.79
	Civilian Care Only	0.96	0.95	0.90	0.87
	Other Nonenrolled	0.92	0.93*	0.76	0.78
	Total	0.95	0.92*	0.80	0.74*
Filed a claim	Military PCM	0.32	0.28*	0.34	0.30*
	Civilian PCM	0.28	0.28	0.42	0.42
	Civilian Care Only	0.32	0.27*	0.43	0.37*
	Other Nonenrolled	0.32	0.24*	0.38	0.29*
	Total	0.32	0.28*	0.35	0.30*

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**Table G-2—Continued**

Measure	Source of Care	Military Status/Health Care System			
		Retirees		AD, ADFM	
		MHS	NCBD	MHS	NCBD
Get routine appointment as soon as wanted	Military PCM	0.79	0.85*	0.64	0.72*
	Civilian PCM	0.79	0.85*	0.65	0.75*
	Civilian Care Only	0.90	0.92*	0.79	0.83*
	Other Nonenrolled	0.81	0.85*	0.62	0.68
	Total	0.86	0.87*	0.65	0.65
Had a BIG problem with claim processing	Military PCM	0.22	0.12*	0.24	0.13*
	Civilian PCM	0.18	0.14	0.17	0.13*
	Civilian Care Only	0.13	0.12*	0.19	0.18
	Other Nonenrolled	0.17	0.17	0.23	0.23
	Total	0.15	0.13*	0.23	0.20
Had a problem with claim processing	Military PCM	0.57	0.41*	0.60	0.44*
	Civilian PCM	0.55	0.42*	0.52	0.39*
	Civilian Care Only	0.45	0.38*	0.54	0.47*
	Other Nonenrolled	0.56	0.45	0.53	0.42
	Total	0.50	0.40*	0.59	0.49*
How often received help by phone	Military PCM	0.86	0.89*	0.68	0.74*
	Civilian PCM	0.81	0.89*	0.66	0.79*
	Civilian Care Only	0.93	0.91	0.87	0.83
	Other Nonenrolled	0.85	0.92*	0.65	0.79*
	Total	0.91	0.89*	0.69	0.67
Problem in getting referral	Military PCM	0.70	0.79*	0.60	0.71*
	Civilian PCM	0.73	0.79*	0.65	0.73*
	Civilian Care Only	0.89	0.88*	0.74	0.72
	Other Nonenrolled	0.76	0.83*	0.66	0.75*
	Total	0.83	0.81*	0.61	0.58
Rating of health care	Military PCM	7.95	8.41*	6.69	7.16*
	Civilian PCM	8.07	8.39*	7.13	7.46*
	Civilian Care Only	8.45	8.77*	7.79	8.11*
	Other Nonenrolled	8.07	8.47*	6.91	7.31*
	Total	8.28	8.52*	6.77	7.01*
Rating of health insurance plan	Military PCM	6.92	7.95*	5.73	6.76*
	Civilian PCM	7.19	7.82*	6.52	7.14*
	Civilian Care Only	7.57	8.32*	6.11	6.86*
	Other Nonenrolled	7.03	7.89*	5.93	6.79*
	Total	7.34	8.07*	5.77	6.50*

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Table G-2—Continued

Measure	Source of Care	Military Status/Health Care System			
		Retirees		AD, ADFM	
		MHS	NCBD	MHS	NCBD
Rating of personal doctor	Military PCM	8.10	8.36*	7.77	8.03*
	Civilian PCM	8.44	8.31*	7.96	7.84*
	Civilian Care Only	8.46	8.69	8.28	8.50*
	Other Nonenrolled	8.40	8.28	7.94	7.82
	Total	8.39	8.49*	7.85	7.95
Rating of specialist	Military PCM	8.04	8.45*	7.37	7.78*
	Civilian PCM	8.19	8.47*	7.51	7.79*
	Civilian Care Only	8.53	8.74	8.16	8.37*
	Other Nonenrolled	8.23	8.70*	7.64	8.11*
	Total	8.38	8.61*	7.47	7.70*
See doctor for illnesses/injury as soon as wanted	Military PCM	0.82	0.88*	0.66	0.77*
	Civilian PCM	0.81	0.90*	0.69	0.81*
	Civilian Care Only	0.92	0.92	0.81	0.82
	Other Nonenrolled	0.84	0.92*	0.66	0.80*
	Total	0.88	0.89*	0.67	0.69
Used ER past 12 months	Military PCM	0.30	0.14*	0.32	0.14*
	Civilian PCM	0.33	0.13*	0.36	0.14*
	Civilian Care Only	0.23	0.12*	0.25	0.14*
	Other Nonenrolled	0.37	0.13*	0.38	0.13*
	Total	0.27	0.12*	0.32	0.15*
Visited doctor's office for care	Military PCM	0.84	0.83*	0.74	0.72
	Civilian PCM	0.87	0.86*	0.90	0.89
	Civilian Care Only	0.83	0.87	0.87	0.90*
	Other Nonenrolled	0.97	0.89	0.91	0.68*
	Total	0.86	0.84*	0.76	0.74*

<sup>1</sup> Abbreviations: AD (active duty); ADFM (active duty family members)

\* Indicates statistically significant difference from military retirees and their families ( $p < 0.05$ ).

## APPENDIX H: CHANGES IN ACCESS AND QUALITY-OF-CARE OUTCOMES IN REGION 11: 1994-1998

Table H-1 shows three-year trends for access and quality-of-care indicators, which were estimated based on 1998 population characteristics. Entries marked with an asterisk (\*) indicate a statistically significant difference ( $p < 0.05$ ) between the estimate for that FY and the preceding one. Where the estimate for FY94 is marked with a #, this indicates a statistically significant linear trend over the time period. The general pattern of results is for a rising trend in perceived satisfaction with access and quality of care from the baseline year (1994). As Table H-1 shows, the greatest increases occurred between 1994 and 1996.

**Table H-1. Four-Year Trends for Access and Quality of Care in Region 11**

Measure/Years Into TRICARE	Military Status (Source of Care)			
	AD (All)			
	FY94	FY96	FY97	FY98
Satisfied with appointment scale	0.32#	0.44*	0.46	0.59*
Cholesterol check past year	0.45	0.39	0.42	0.38
Interpersonal concern of providers	0.47#	0.58*	0.60	0.79*
Dental care past year	0.89	0.92	0.88*	0.88
Satisfied with convenience of treatment location	0.81	0.87	0.86	0.87
Satisfied with time spent with provider	0.61#	0.70	0.67	0.77*
Satisfied with convenience of hours	0.63#	0.70	0.74	0.78
Satisfied with access to care if needed	0.59#	0.67	0.69	0.73
Satisfied with access to specialist	0.38#	0.45	0.54	0.61
Satisfied with access to hospital care	0.67#	0.83*	0.84	0.80
Satisfied with access to emergency care	0.76	0.84*	0.82	0.81
Satisfied with ease of making an appointment	0.45#	0.57*	0.64	0.69
Satisfied with waiting time to see provider	0.42#	0.50	0.58	0.67*
Satisfied with appointment gap	0.55#	0.64	0.60	0.69*
Satisfied with availability of health care information by phone	0.38#	0.46	0.53	0.67*
Satisfied with availability of prescription services	0.75#	0.74	0.82*	0.86
Satisfied with thoroughness of exam	0.63#	0.69	0.78*	0.79
Satisfied with ability to diagnose	0.64#	0.63	0.72*	0.75
Satisfied with skill of provider	0.71#	0.70	0.80*	0.81
Satisfied with thoroughness of treatment	0.68#	0.65	0.75*	0.78
Satisfied with outcome of health care	0.63#	0.69	0.74	0.80*
Satisfied with overall quality of care	0.66#	0.68	0.77*	0.80
Satisfied with explanation of procedures	0.66#	0.76*	0.76	0.79
Satisfied with explanation of medical tests	0.64#	0.73	0.80*	0.78
Satisfied with attention by provider	0.64#	0.69	0.74	0.83*
Satisfied with admin staff courtesy	0.58#	0.70*	0.72	0.88*
Flu shot past year	0.80#	0.80	0.86*	0.83
Mammogram past year (40+)	-	-	-	-
Mammogram past year (50+)	-	-	-	-
PAP test past year	0.84	0.78	0.84	0.78
Physical exam past year	0.59#	0.54	0.52	0.48
Prenatal care first trimester				

*Continued on next page*

Table H-1—Continued

Measure/Years Into TRICARE	Military Status (Source of Care)			
	AD (All)			
	FY94	FY96	FY97	FY98
Fewer than 3 calls to get appointment	0.59#	0.54	0.55	0.88*
Used ER past year	0.46#	0.28*	0.24	0.30*
Any doctor visit	0.74	0.78	0.78	0.77
Waited less than 30 minutes in provider office	0.72#	0.65	0.72	0.77
<u>Measure/Years into TRICARE</u>	Non-AD (Prime)			
	<u>FY94</u>	<u>FY96</u>	<u>FY97</u>	<u>FY98</u>
Satisfied with appointment scale	0.86	0.85	0.88	0.88
Cholesterol check past year	0.61	0.62	0.65	0.61
Interpersonal concern of providers	0.85#	0.85	0.89*	0.95*
Dental care past year	0.69	0.70	0.75*	0.67*
Satisfied with convenience of treatment location	0.88	0.91	0.93	0.91
Satisfied with time spent with provider	0.88#	0.86	0.91*	0.93
Satisfied with convenience of hours	0.92#	0.96*	0.94	0.99*
Satisfied with access to care if needed	0.91	0.94	0.94	0.96
Satisfied with access to specialist	0.92	0.91	0.89	0.94
Satisfied with access to hospital care	0.96#	0.96	0.97	0.99
Satisfied with access to emergency care	0.92	0.97*	0.95	0.96
Satisfied with ease of making an appointment	0.96	0.95	0.95	0.97
Satisfied with waiting time to see provider	0.88#	0.86	0.90*	0.92
Satisfied with appointment gap	0.88	0.89	0.90	0.92
Satisfied with availability of health care information by phone	0.86	0.83	0.88*	0.88
Satisfied with availability of prescription services	0.95	0.93	0.94	0.94
Satisfied with thoroughness of exam	0.91#	0.90	0.94*	0.95
Satisfied with ability to diagnose	0.88	0.91	0.93	0.91
Satisfied with skill of provider	0.92#	0.96*	0.94	0.99*
Satisfied with thoroughness of treatment	0.94	0.90*	0.94*	0.96
Satisfied with outcome of health care	0.92	0.91	0.93	0.95
Satisfied with overall quality of care	0.93#	0.93	0.96	0.97
Satisfied with explanation of procedures	0.94	0.91	0.93	0.96
Satisfied with explanation of medical tests	0.92	0.91	0.93	0.94
Satisfied with attention by provider	0.91	0.89	0.92	0.94
Satisfied with admin staff courtesy	0.95	0.95	0.96	0.98
Flu shot past year	0.42#	0.51*	0.64*	0.61
Mammogram past year (40+)	0.68	0.64	0.69	0.69
Mammogram past year (50+)	0.69	0.68	0.73	0.72
PAP test past year	0.76#	0.59*	0.62	0.60
Physical exam past year	0.70	0.68	0.69	0.63
Prenatal care first trimester	—	—	—	—
Fewer than 3 calls to get appointment	0.82#	0.77	0.71*	0.96*
Used ER past year	0.34#	0.16*	0.18	0.20
Any doctor visit	0.93#	0.96*	0.80*	0.83
Waited less than 30 minutes in provider office	0.93#	0.92	0.87*	0.92*

Continued on next page

Table H-1—Continued

Measure/Years Into TRICARE	Military Status (Source of Care)			
	Non-AD (Civilian)			
	FY94	FY96	FY97	FY98
Satisfied with appointment scale	0.44#	0.56*	0.65*	0.70
Cholesterol check past year	0.36#	0.45*	0.47	0.47
Interpersonal concern of providers	0.63#	0.65	0.74*	0.89*
Dental care past year	0.52#	0.62*	0.62	0.63
Satisfied with convenience of treatment location	0.80#	0.82	0.88*	0.87
Satisfied with time spent with provider	0.71#	0.70	0.79*	0.88*
Satisfied with convenience of hours	0.80#	0.83	0.86	0.90*
Satisfied with access to care if needed	0.68#	0.74	0.77	0.82*
Satisfied with access to specialist	0.58#	0.63	0.68	0.75*
Satisfied with access to hospital care	0.83#	0.85	0.89	0.89
Satisfied with access to emergency care	0.81	0.87	0.87	0.85
Satisfied with ease of making an appointment	0.54#	0.69*	0.74	0.81*
Satisfied with waiting time to see provider	0.60#	0.66	0.73*	0.77
Satisfied with appointment gap	0.64#	0.66	0.74*	0.76
Satisfied with availability of health care information by phone	0.52#	0.65*	0.73*	0.78
Satisfied with availability of prescription services	0.81#	0.79	0.84	0.86
Satisfied with thoroughness of exam	0.78#	0.79	0.85*	0.88
Satisfied with ability to diagnose	0.77#	0.75	0.83*	0.85
Satisfied with skill of provider	0.83#	0.84	0.89*	0.91
Satisfied with thoroughness of treatment	0.81#	0.77	0.84*	0.88
Satisfied with outcome of health care	0.80#	0.78	0.83	0.89*
Satisfied with overall quality of care	0.80#	0.81	0.86	0.91*
Satisfied with explanation of procedures	0.81#	0.79	0.86*	0.89
Satisfied with explanation of medical tests	0.81#	0.75	0.84*	0.90*
Satisfied with attention by provider	0.78#	0.76	0.83*	0.90*
Satisfied with admin staff courtesy	0.68#	0.81*	0.80	0.93*
Flu shot past year	0.33#	0.35	0.45*	0.42
Mammogram past year (40+)	0.58	0.53	0.62	0.61
Mammogram past year (50+)	0.73	0.68	0.74	0.64
Number of nights in hospital past year	0.39	1.01*	0.58	0.60
Number of outpatient visits past year	3.54#	7.93*	8.54	7.70
PAP test past year	0.74	0.68	0.68	0.67
Physical exam past year	0.47	0.56*	0.60	0.53*
Prenatal care first trimester	0.96	0.79	0.95*	0.83*
Fewer than 3 calls to get appointment	0.50#	0.54	0.54	0.89*
Used ER past year	0.53#	0.36*	0.29*	0.36*
Any doctor visit	0.90	0.97*	0.88*	0.94*
Waited less than 30 minutes in provider office	0.75#	0.78	0.80	0.86*

Continued on next page

Table H-1—Continued

Measure/Years Into TRICARE	Military Status (Source of Care)			
	Non-AD (Other Nonenrolled)			
	FY94	FY96	FY97	FY98
Satisfied with appointment scale	0.35#	0.43*	0.55*	0.52
Cholesterol check past year	0.50	0.48	0.57*	0.50
Interpersonal concern of providers	0.58#	0.61	0.69*	0.82*
Dental care past year	0.44#	0.59*	0.66*	0.61
Satisfied with convenience of treatment location	0.76	0.80	0.85*	0.79
Satisfied with time spent with provider	0.66#	0.71	0.75	0.76
Satisfied with convenience of hours	0.78	0.83	0.85	0.82
Satisfied with access to care if needed	0.56	0.59	0.63	0.59
Satisfied with access to specialist	0.51	0.53	0.58	0.61
Satisfied with access to hospital care	0.68	0.69	0.73	0.68
Satisfied with access to emergency care	0.74	0.78	0.75	0.73
Satisfied with ease of making an appointment	0.38#	0.55*	0.65*	0.56
Satisfied with waiting time to see provider	0.54#	0.62*	0.67	0.66
Satisfied with appointment gap	0.51#	0.59*	0.64	0.60
Satisfied with availability of health care information by phone	0.41#	0.47	0.68*	0.53*
Satisfied with availability of prescription services	0.75	0.78	0.82	0.81
Satisfied with thoroughness of exam	0.73#	0.74	0.77	0.82
Satisfied with ability to diagnose	0.69#	0.74	0.80	0.80
Satisfied with skill of provider	0.77#	0.83	0.87	0.84
Satisfied with thoroughness of treatment	0.74	0.77	0.81	0.81
Satisfied with outcome of health care	0.74	0.77	0.80	0.75
Satisfied with overall quality of care	0.75	0.78	0.85*	0.78
Satisfied with explanation of procedures	0.74	0.79	0.82	0.73*
Satisfied with explanation of medical tests	0.75	0.79	0.81	0.75
Satisfied with attention by provider	0.71#	0.75	0.79	0.86
Satisfied with admin staff courtesy	0.71#	0.77	0.81	0.93*
Flu shot past year	0.43	0.44	0.56*	0.49
Mammogram past year (40+)	0.69	0.66	0.68	0.54
Mammogram past year (50+)	0.79	0.71	0.71	0.66
PAP test past year	0.71	0.73	0.69	0.61
Physical exam past year	0.54	0.62*	0.67	0.55*
Prenatal care first trimester	—	—	—	—
Fewer than 3 calls to get appointment	0.51#	0.50	0.53	0.77*
Used ER past year	0.53#	0.35*	0.30	0.34
Any doctor visit	0.84	0.90*	0.75*	0.96*
Waited less than 30 minutes in provider office	0.70#	0.72	0.74	0.80

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Table H-1—Continued

Measure/Years Into TRICARE	Military Status (Source of Care)			
	Total (All)			
	FY94	FY96	FY97	FY98
Satisfied with appointment scale	0.56#	0.62*	0.69*	0.73*
Cholesterol check past year	0.47	0.48	0.52	0.48
Interpersonal concern of providers	0.67#	0.70	0.77*	0.89*
Dental care past year	0.62#	0.68*	0.71*	0.68
Satisfied with convenience of treatment location	0.83#	0.86	0.89*	0.88
Satisfied with time spent with provider	0.75#	0.76	0.82*	0.87*
Satisfied with convenience of hours	0.81#	0.85*	0.86	0.90*
Satisfied with access to care if needed	0.73#	0.77	0.80	0.83
Satisfied with access to specialist	0.67#	0.69	0.72	0.78*
Satisfied with access to hospital care	0.82#	0.86*	0.89	0.89
Satisfied with access to emergency care	0.83	0.89*	0.88	0.87
Satisfied with ease of making an appointment	0.66#	0.74*	0.79*	0.82*
Satisfied with waiting time to see provider	0.66#	0.70*	0.76*	0.80*
Satisfied with appointment gap	0.69#	0.73	0.76	0.79*
Satisfied with availability of health care information by phone	0.61#	0.65*	0.75*	0.77*
Satisfied with availability of prescription services	0.84#	0.83	0.87*	0.88
Satisfied with thoroughness of exam	0.79#	0.80	0.86*	0.88
Satisfied with ability to diagnose	0.77#	0.79	0.85*	0.85
Satisfied with skill of provider	0.83#	0.85	0.89*	0.91*
Satisfied with thoroughness of treatment	0.81#	0.80	0.86*	0.88
Satisfied with outcome of health care	0.80#	0.81	0.85*	0.88*
Satisfied with overall quality of care	0.81#	0.82	0.88*	0.90*
Satisfied with explanation of procedures	0.82#	0.83*	0.87	0.88*
Satisfied with explanation of medical tests	0.81#	0.82	0.86*	0.87*
Satisfied with attention by provider	0.79#	0.80	0.85*	0.90*
Satisfied with admin staff courtesy	0.77#	0.84*	0.85	0.94*
Flu shot past year	0.44#	0.50	0.60*	0.57
Mammogram past year (40+)	0.63	0.59	0.62	0.62
Mammogram past year (50+)	0.68	0.66	0.67	0.65
PAP test past year	0.71#	0.63*	0.63	0.62
Physical exam past year	0.56	0.58*	0.60	0.53*
Prenatal care first trimester	0.92	0.73	0.92*	0.86*
Satisfied with health care technical aspects (scale)	0.70#	0.71	0.79*	0.81*
Fewer than 3 calls to get appointment	0.66#	0.63	0.61	0.91*
Used ER past year	0.45#	0.25*	0.23*	0.29*
Any doctor visit	0.87#	0.91*	0.81*	0.87*
Waited less than 30 minutes in provider office	0.80#	0.80	0.81*	0.86*

## APPENDIX I. TRENDS IN ACCESS AND QUALITY OF CARE UNDER TRICARE

Trends in measures of access to and quality of care are shown in table I-1 for the beneficiary population broken down by military status and source of care. Significant linear trends are indicated by an # if shown next to the "base" values. Entries marked with an asterisk (\*) indicate a statistically significant change from the previous year's values. Most measures exhibited a significant linear trend, i.e., increasing satisfaction over time.

**Table I-1. Four-Year Trends in Access and Quality of Care**

Measure/Years Into TRICARE	Military Status (Source of Care)			
	AD (All)			
	Base	+1	+2	+3
BP check past year	0.79#	0.91*	0.90	0.92
Cholesterol check past year	0.42#	0.40	0.37*	0.39
Interpersonal concern of providers	0.49#	0.68*	0.78*	0.81
Satisfied with convenience of treatment location	0.82#	0.85*	0.86	0.88
Satisfied with time spent with provider	0.61#	0.72*	0.77*	0.79
Satisfied with convenience of hours	0.62#	0.70*	0.75*	0.79
Satisfied with access to care if needed	0.59#	0.66*	0.69*	0.74*
Satisfied with access to specialist	0.41#	0.51*	0.58*	0.62
Satisfied with access to hospital care	0.68#	0.75*	0.79*	0.81
Satisfied with access to emergency care	0.69#	0.70	0.73	0.82*
Satisfied with ease of making an appointment	0.47#	0.60*	0.62	0.70*
Satisfied with waiting time to see provider	0.43#	0.58*	0.61*	0.68*
Satisfied with overall quality of care	0.65#	0.73*	0.76*	0.81*
Any doctor visit	0.68	0.77*	0.72*	0.76
Measure/Years Into TRICARE	Non-AD (Prime)			
	Base	+1	+2	+3
	Base	+1	+2	+3
BP check past year	0.77#	0.91*	0.92	0.92
Cholesterol check past year	0.39#	0.48*	0.50	0.46*
Interpersonal concern of providers	0.59#	0.77*	0.84*	0.89*
Satisfied with convenience of treatment location	0.80#	0.85*	0.87	0.88
Satisfied with time spent with provider	0.67#	0.78*	0.82*	0.88*
Satisfied with convenience of hours	0.76#	0.84*	0.86*	0.90*
Satisfied with access to care if needed	0.62#	0.77*	0.78	0.83*
Satisfied with access to specialist	0.52#	0.68*	0.72*	0.75
Satisfied with access to hospital care	0.75#	0.84*	0.85	0.89*
Satisfied with access to emergency care	0.72#	0.78*	0.80	0.85*
Satisfied with ease of making an appointment	0.54#	0.74*	0.77*	0.82*
Satisfied with waiting time to see provider	0.56#	0.70*	0.73*	0.77*
Satisfied with overall quality of care	0.75#	0.84*	0.87*	0.91*
Any doctor visit	0.92	0.89*	0.91*	0.94*

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Table I-1—Continued

Measure/Years Into TRICARE	Military Status (Source of Care)			
	Non-AD (Civilian)			
	Base	+1	+2	+3
BP check past year	0.89#	0.95*	0.96	0.94
Cholesterol check past year	0.65	0.68*	0.67	0.61
Interpersonal concern of providers	0.85#	0.91*	0.95*	0.95
Satisfied with convenience of treatment location	0.90	0.92*	0.94	0.92
Satisfied with time spent with provider	0.87#	0.89*	0.91	0.93
Satisfied with convenience of hours	0.93#	0.96*	0.96	0.99*
Satisfied with access to care if needed	0.91#	0.93*	0.94	0.96
Satisfied with access to specialist	0.89#	0.92*	0.91	0.94
Satisfied with access to hospital care	0.94#	0.96*	0.95	0.99*
Satisfied with access to emergency care	0.91#	0.95*	0.94	0.96
Satisfied with ease of making an appointment	0.94#	0.95	0.96*	0.97
Satisfied with waiting time to see provider	0.83#	0.84	0.87*	0.92*
Satisfied with overall quality of care	0.93#	0.96*	0.96	0.97
Any doctor visit	0.94#	0.84*	0.82	0.83

Measure/Years Into TRICARE	Non-AD (Other Nonenrolled)			
	Base	+1	+2	+3
BP check past year	0.88#	0.95*	0.97*	0.95
Cholesterol check past year	0.55	0.60*	0.60	0.52
Interpersonal concern of providers	0.58#	0.72*	0.80*	0.83
Satisfied with convenience of treatment location	0.71#	0.78*	0.79	0.78
Satisfied with time spent with provider	0.65#	0.76*	0.77	0.77
Satisfied with convenience of hours	0.74#	0.84*	0.83	0.81
Satisfied with access to care if needed	0.56#	0.59*	0.64	0.61
Satisfied with access to specialist	0.44#	0.53*	0.57	0.62
Satisfied with access to hospital care	0.66#	0.68	0.75*	0.69
Satisfied with access to emergency care	0.66#	0.70	0.72	0.75
Satisfied with ease of making an appointment	0.45#	0.57*	0.64*	0.57
Satisfied with waiting time to see provider	0.53#	0.64*	0.67	0.67
Satisfied with overall quality of care	0.73#	0.80*	0.81	0.78
Any doctor visit	0.86#	0.89*	0.93*	0.95

Measure/Years Into TRICARE	All			
	Base	+1	+2	+3
BP check past year	0.80#	0.91*	0.91	0.90
Cholesterol check past year	0.49	0.53*	0.52	0.48*
Interpersonal concern of providers	0.66#	0.80*	0.87*	0.89*
Satisfied with convenience of treatment location	0.82#	0.87*	0.88	0.88
Satisfied with time spent with provider	0.73#	0.81*	0.84*	0.87*
Satisfied with convenience of hours	0.79#	0.85*	0.87*	0.90*
Satisfied with access to care if needed	0.70#	0.78*	0.80*	0.83*
Satisfied with access to specialist	0.62#	0.72*	0.75*	0.78
Satisfied with access to hospital care	0.79#	0.84*	0.86*	0.89*
Satisfied with access to emergency care	0.78#	0.82*	0.83	0.87*
Satisfied with ease of making an appointment	0.65#	0.76*	0.79*	0.82*
Satisfied with waiting time to see provider	0.62#	0.71*	0.75*	0.80*
Satisfied with overall quality of care	0.79#	0.85*	0.88*	0.90*
Any doctor visit	0.86#	0.84*	0.84*	0.86



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USAF MALCOM GROW MEDICAL CENTER ANDREWS AFB MD

Attn: COMMANDING OFFICER

USAF WILFORD HALL MEDICAL CENTER LACKLAND AFB TX

Attn: COMMANDING OFFICER

USAF WRIGHT-PATTERSON MEDICAL CENTER WPAFB DAYTON OH

Attn: COMMANDING OFFICER